This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

LARDNER'S CABINET CYCLOPÆDIA.

A SERIES of ORIGINAL WORKS.

Price THREE SHILLINGS AND SIXPENCE *each* VOLUME.

THE SERIES, *in* 132 VOLUMES, £19. 19s.

The HISTORY of ENGLAND. By Sir James Mackintosh: with a Continuation from A.D. 1572, by W. Wallace, Esq. and R. Bell, Esq. 10 vols. . . . . 35s.

The HISTORY of IRELAND, from the earliest Kings of that Realm down to its last Chief. By Thomas Moore, Esq. 4 vols. 14s.

The HISTORY of SCOTLAND. By Sir Walter Scott Bart. 2 vols. . . 7s.

HISTORY of the UNITED STATES of AMERICA, from the Discovery of America to the Election of General Jackson to the Presidency in 1829. By the Rev. H. Fergus. 2 vols. . . . . 7s.

The HISTORY of FRANCE, from the earliest Period to the Abdication of Napoleon. By E. E. Crowe, Esq. 3 vols. . . 10s. 6d.

The HISTORY of the NETHER-LANDS, from the Invasion of the Romans to the Belgian Revolution in 1830. By T. C. Grattan, Esq. 1 vol. . . . . 3s. 6d.

The HISTORY of SWITZERLAND, from the earliest Period to 1830. 1 vol. 3s. 6d.

The HISTORY of DENMARK, SWEDEN, and NORWAY. By Dr. Dunham. 3 vols. . . . . 10s. 6d.

The HISTORY of POLAND, from the earliest Period to 1830. By Dr. Dunham. 1 vol. . . . . 3s. 6d.

The HISTORY of the GERMANIC EMPIRE. By Dr. Dunham. 3 vols. 10s. 6d.

The HISTORY of SPAIN and POR-TUGAL By Dr. Dunham. 5 vols. 17s. 6d.

The HISTORY of RUSSIA, from the earliest Period to the Treaty of Tilsit (1807). By R. Bell, Esq. 3 vols. . . . 10s. 6d.

A HISTORY of EUROPE during the MIDDLE AGES. By Dr. Dunham. 4 vols. 14s.

The HISTORY of the ITALIAN REPUBLICS; or, of the Origin, Progress, and Fall of Freedom in Italy, from A.D. 476 to 1805. By J. C. L. De Sismondi. 1 vol. 3s. 6d.

The HISTORY of the FALL of the ROMAN EMPIRE; comprising a View of the Invasion and Settlement of the Barbarians. By J. C. L. De Sismondi. 2 vols. . . 7s.

The HISTORY of GREECE. By the Right Rev. the Lord Bishop of St. David's (Connop Thirlwall, D.D.) 8 vols. . . 28s.

The HISTORY of ROME, from the earliest Times to the Founding of Constantinople. 2 vols. . . . . 7s.

A TREATISE on the ARTS, MANU-FACTURES, MANNERS, and INSTITUTIONS of the GREEKS and ROMANS. By the Rev. T. D. Fosbroke, &c. 2 vols. . 7s.

The HISTORY of the CHRISTIAN CHURCH, from its Foundation to A.D. 1492. By the Rev. H. Stebbing, D.D. 2 vols. . 7s.

The HISTORY of the REFORMA-TION. By Dr. Stebbing. 2 vols. . . 7s.

A HISTORY of MARITIME and INLAND DISCOVERY. By W. D. Cooley, Esq. 3 vols. . . . . 10s. 6d.

OUTLINES of HISTORY, from the earliest Period to the Abdication of Napoleon. By T. Keightley, Esq. 1 vol. . . 3s. 6d.

The CHRONOLOGY of HISTORY: containing Tables, Calculations, and Statements, indispensable for ascertaining the Dates of Historical Events and of Public and Private Documents, from the earliest Periods to the present Time. By Sir Harris Nicolas, K.C.M.G. 1 vol. . . . . 3s. 6d.

The LIVES of the most Eminent MILITARY COMMANDERS. By the Rev. G. R. Gleig. 3 vols. . . . . 10s. 6d.

The LIVES of the BRITISH AD-MIRALS. With an Introductory View of the Naval History of England. By R. Southey, LL.D. The concluding volume is by R. Bell, Esq. 5 vols. . . . . 17s. 6d.

The LIVES of Eminent BRITISH LAWYERS. By H. Roscoe, Esq. Barrister-at-Law. 1 vol. . . . . 3s. 6d.

LIVES of the STATESMEN of the COMMONWEALTH of ENGLAND. With an Introductory Treatise on the Popular Progress in English History. By J. Forster, Esq. With original Portraits of Pym, Eliot, Hampden, and Cromwell, and an Historical Scene after a Picture by Cattermole. 5 vols. 17s. 6d.

The above five volumes form Mr. Forster's *portion of*

LIVES of the most Eminent BRITISH STATESMEN. By Sir James Mackintosh, Right Hon. T. P. Courtenay, and J. Forster, Esq. 7 vols. . . . . 24s. 6d.

LIVES of the most Eminent ENGLISH POETS. By R. Bell, Esq. 2 vols. . 7s.

LONDON: LO[redacted]ND LONGMANS.

THE

MEDICAL ASPECTS

OF

DEATH,

AND

THE MEDICAL ASPECTS

OF THE

HUMAN MIND.

BY JAMES BOWER HARRISON,
M.R.C.S.L. ETC.
FORMERLY ONE OF THE RESIDENT MEDICAL OFFICERS OF THE MANCHESTER ROYAL INFIRMARY, AND SURGEON TO THE ARDWICK AND ANCOATS DISPENSARY, ETC.

LONDON:
LONGMAN, BROWN, GREEN, AND LONGMANS.
1852.

157. c. 113.

London:
[illegible] and Sons,
Ave-street Square.

PREFACE.

In youth it is not common to think much about death. A person would be considered to be of a very serious turn of mind who gave attention to such a subject in the earlier periods of his life. There comes a time, however, sooner or later, in which it is perceived that there is a reality in the meaning of the speeches we have so long unthinkingly made or heard others make. We wake up to the conviction that we are ourselves no exception to the rule; in fact, to the conviction that we shall die. Already we find ourselves in the middle period of life; already the scene is shifting, and we begin to perceive that it will shift still more. It wants no great

exhortation, then, to see that every one is individually interested in all that relates to death. A person must be wanting in reflection if he does not consider, at least when he has made some progress in life, that he will very soon find himself at his journey's end. It is natural then to have a curiosity about death; and it is partly with a view to satisfy this curiosity, and partly with a view to fill up the intervals left by more arduous professional studies, that I have written what follows.

But some will say the subject is a distasteful one, and, like Hotspur's fop, be offended that a slovenly, unhandsome corse should be brought between the wind and their nobility. The true nobility of the mind does not, however, shrink from contemplating human nature in all its phases, untricked out with ornament or disguised by forms. I am sure the reader who has the curiosity to look at these pages will not be wanting in such nobility of mind.

In order to relieve the subject, I have purposely introduced more collateral matter than

might be absolutely necessary for its elucidation.

I have never thought it essential that a book should be dry in order to be useful.

The second paper in this volume I have been induced to reprint from the Psychological Journal, because it has received the approbation of many friends in whose judgment I am pleased to confide. I am aware that it contains remarks to which some may take exception; but I write not to echo the sentiments of others, but to make known my own. I regret that at the time I wrote it I had not had the advantage of reading the very able remarks of Dr. Conolly, in his Croonian lectures delivered before the College of Physicians. The fearless and humane character of these lectures deserves a higher praise than it is in the author's power to bestow.

Higher Broughton, Manchester,
1851.

CONTENTS.

	Page
The Medical Aspects of Death - -	1
The Medical Aspects of the Human Mind -	113

THE

MEDICAL ASPECTS OF DEATH.

Hamlet. Pr'ythee, Horatio, tell me one thing.
Hor. What's that, my lord?
Ham. Dost thou think Alexander looked o' this fashion i' the earth?
Hor. Even so.
Ham. And smelt so? pah!
Hor. Even so, my lord. SHAKSPEARE.

THE

MEDICAL ASPECTS OF DEATH.

"Dost thou think Alexander looked o' this fashion i' the earth?" How pregnant is such a question with meaning,—the noble dust of Alexander like the corrupting skull of the king's jester! How natural to ask ourselves the question, Shall we also look o' this fashion i' the earth?—we want no Horatio to answer, "Even so." But though it is common to speak of death, I do not think it is very common to *consider* it. We are, in truth, too much afraid to look at it in its physical aspects. The subject may seem repulsive, but it is one which a rational being should not altogether

disregard, because many practical advantages arise from making it an object of study. It must be remembered that it is a privilege peculiar to human nature, to preconsider the last moments of existence. But I am not one of those who would wish to throw a gloom upon life, and carry the skull round at the feast — I would rather throw the light of reason, as far as it will shine, on the mysteries of the grave.

How interesting are our first impressions of death! — when we first looked timidly at the familiar features of a dear parent stiffened and pinched with the hand of death! Who cannot recall to mind that cold apartment which had so lately been the scene of anxious watching and tender solicitude, — the formal sheeted corse, — the appalling stillness of the compressed lip and icy coldness of that last kiss? It is at such times that the feelings rise to the noblest sentiments of our nature, and we see the littleness of human ambition, and the emptiness of our fondest wishes; — at these periods alone can we perceive the real signi-

ficance of life, for then the hurry of business is suspended, and there is a pause in the drama of events.

It would be curious to trace the forms and ceremonies which surviving friends have adopted to show their respect for the dead. The custom of strewing flowers on the tomb is, perhaps, one of the most simple and touching. This custom is beautifully alluded to in "Cymbeline":—

> "With fairest flowers,
> Whilst summer lasts and I live here, Fidele,
> I'll sweeten thy sad grave: thou shalt not lack
> The flower that's like thy face, pale primrose, nor
> The azure hare-bell like thy veins; no nor
> The leaf of eglantine, whom not to slander,
> Outsweeten'd not thy breath."

I shall not stop, however, to dwell on these topics, nor describe the "trappings and suits of woe," which are not always the accompaniments of real grief. The nodding plumes and lengthened processions of the great only betray how little wealth and rank can rescue their

possessors from the common fate of human kind.

In how many cases might we not say, with Byron,—

> "Of all
> The fools who flock'd to swell or see the show,
> Who cared about the corpse? the funeral
> Made the attraction, and the black the woe." *

The *Signs* of death are important in a medical point of view; for though the extinction of life is generally too apparent to admit of question, there can be no doubt but that occasional errors have arisen. In most of these cases, it is certain that undue haste and culpable carelessness have contributed to the result; but we all feel so deeply the horror of such mistakes, that some fear is excusable, even when we have no apprehension of such carelessness on the part of those who may have to do the last offices for ourselves. In all periods the subject of premature interment has excited great in-

* Byron's Vision of Judgment.

terest, and the very fears which have been entertained have been the occasion of many stories equally marvellous and horrible.

In order to provide against premature interment, the Romans are said to have waited seven days before they interred the dead; those who had charge of the corpse calling the name of the deceased many times in a loud voice. It was this custom which constituted the *Conclamatio.* Just before the body was finally buried, the name was again loudly called; and then it was considered proper to enter on the funeral ceremonies.

Terence makes allusion to this custom when he says,

"Desine, — jam conclamatum est."

If we are to believe French writers, it would seem that, formerly, premature interments were very common in France. It is to be hoped, however, that many of their statements are exaggerated or incorrect. Bruhier has col-

lected together upwards of 180 cases, in which mistakes were made as to the signs of death: of these, 52 were interred alive, 4 opened before death, 53 recovered spontaneously after having been shut up in the coffin (renfermées dans le cerceuil), 72 reputed dead without being so. At the same time that we are happy to think that Bruhier must have greatly indulged his imagination, it is probable that the French hospitals may have been the scene of many culpable errors.

Louis, in his more able letter on the Signs of Death, which was published in 1752, relates the case of a young woman, *en couches*, who left the Hôtel-Dieu on account of the prevalence of an epidemic, and sought refuge at the Hôpital de la Salpétrière. On her way she fainted twice, and again on her arrival fell into a fainting fit. She was thought by the sisters of charity to be dead, and remained two hours exposed in the court to a rigorous cold. She was then carried into the *salle des morts* (dead-house). Some time afterwards, a pupil

hearing groans, came affrighted to inform Louis. Louis went to the spot, but found her already dead; though she had made efforts to get extricated from the winding sheet in which she was enveloped, and had one foot on the ground, out of the litter, and an arm leaning on the bar of the trestle of a dissecting table, by the side of which she had been placed.*

Many of the stories told of persons being buried alive, partake too much of the marvellous, to meet with unqualified acceptance. In periods of great mortality, and when epidemics have raged, there can be little doubt, however, that such instances have occurred. The philanthropic Howard, in his work on Prisons, says: — "I have known instances where persons, supposed to be dead of the gaol fever and brought out for burial, on being washed with cold water, have shown signs of life, and soon afterwards recovered." I have

* Art. Inhumations precipitées: Dict. de Médecine et de Chirurgie.

myself frequently heard people express their fears of being interred alive. I remember a young lady who, on her death-bed, made a solemn appeal to her father, that her body might be thrown into the sea as soon as it should be known that she was dead. Her father properly and ingeniously opposed her wish, in expressing his desire that her remains should rest in the same grave with his own. A lady in Manchester had so strong a fear of being buried alive, that she left a sum of money, the interest of which was to be received only on conditions that her body was kept above ground. The body was bound over closely like a mummy, and was deposited in the Natural History Museum, where, I believe, it may still be seen by the curious.

Perhaps this feeling had been induced by some circumstances in her life, which had rendered her extremely fearful of such mistakes. Dr. Paris tells us, "that the daughter of Henry Laurens, the first president of the Ame-

rican Congress, when an infant, was laid out as dead of the smallpox; upon which the window of the apartment, that had been carefully closed during the progress of the disease, was thrown open to ventilate the chamber, when the fresh air revived the supposed corpse, and restored her to her family: this circumstance occasioned in her father so powerful a dread of living interment, that he directed by will that his body should be burnt, and enjoined on his children the performance of this wish as a sacred duty."*

Amongst the ordinary signs of death the absence of respiration is that which is most popular, but at the same time the most likely to deceive. To ascertain whether the breathing be entirely suspended, it is a common practice to hold a looking-glass to the face, that the respiration may be indicated by the mist on its surface.

* Medical Jurisprudence, p. 5.

In King Lear we have the passage—

> "Lend me a looking glass;
> If that her breath will mist or stain the stone,
> Why, then she lives."
>
> Act V. Sc. III.

For the same reason the stirring of any light substance, such as down, which may rest about the mouth, has been regarded as a fine indication of the act of respiration; but this, like the mist on the looking-glass, is but a deceptive or inaccurate method; and Shakspeare accordingly represented Prince Henry as having been deceived, when he carried off the crown from his father's pillow—

> "By his gates of breath
> There lies a downy feather which stirs not;
> Did he suspire, that light and weightless down
> Perchance must move." *

If the observance of the respiration be taken as the indication of life, and its absence as a proof of death, the exposure of the naked chest

* For the suggestion of these apt quotations, I am indebted to Paris's Med. Jurisprudence.

and abdomen would enable the spectator to form a much more accurate appreciation of it, especially if it be made carefully and for a sufficient length of time.

One indication of death is found in the Rigidity of the corpse. It is true that persons in some nervous diseases have been represented as closely assimilating the dead, even with respect to the stiffness of the body. The professional man could scarcely, however, be deceived by such cases. The stiffness of death is often not fairly established until the body is already cold*, and, when overcome by pressure, does not return, as the contractions which arise from nervous causes. Some cases of catalepsy have been related which are indeed very astonishing, but, as I have said, they could only deceive unprofessional people, and those not familiar with the appearances of a corpse.

* Sommer observed, that, contrary to the statement of Nysten, the body became rigid before it was completely cold.

The rigidity of death appears to come on with various degrees of rapidity, and its duration is also various. It usually commences in about seven hours*, but it may be deferred considerably longer, even to twenty or thirty hours. When the body is greatly weakened by disease, the rigidity comes on much sooner, but is more evanescent. It has been known to arise in fifteen or twenty minutes. Again, in its duration there is much variety; ordinarily it exists from twenty-four to thirty-six hours, but may continue many days. Much may be supposed to depend on the humidity and warmth of the atmosphere.

There is something singular in this stiffening of the body. It seems like the final act of life, and has been supposed to be the last effort of muscular power. Every one must be struck with the analogy it presents to the coagulation of the blood; and, indeed, it has been imagined by some physiologists that it was

* According to Sommer, seldom if ever later.

dependent on that cause. This does not appear in reality to be the case; but there are still many interesting points of similarity between these phenomena, and they are both probably dependent on the last efforts of life.

The rigidity of the corpse is, perhaps, never entirely wanting, though it may be brief in particular cases.

It does not seem to be confined to the external muscles of the body, but is also evident, and indeed particularly manifested, in the heart and great blood-vessels. The walls of the heart contract forcibly after the external signs of death, and the arteries also contract, and propel their contents into the veins. Before this circumstance was properly understood, it was common to suppose that this contracted state of the heart was the result of disease; and even in modern times this error has been made. In the same way the ancients were misled by this contraction; for, as they found the arteries void of blood, they regarded them as tubes for the conveyance of air; and in this way arose the

term artery (ἀήρ, air; τηρέω, to keep), improperly used to indicate a blood-vessel.

The rapidity with which the body cools after death, must be very dependent on the circumstances in which it is placed, and the manner in which it is clothed. According to Dr. Taylor, the average time is about fifteen or sixteen hours when not much clad, and when the temperature is about 60°. He has known a body keep warm thirty or forty hours; and as he remarks, the heat would obviously remain the longest, when the death was violent and the person robust. There is always, however, some uncertainty in judging of the period of death by the warmth of the body.*

It is a curious fact in relation to the temperature of the body, that in cases of Asiatic cholera, the body, previously quite cold, has become warm immediately before, or even after death.†

* See Guy's Hospital Reports, p. 388. vol. vii. 1851, Remarks on Strangulation.

† See Alison's Pathology.

The effects of Stimulants in producing muscular contractions soon after the cessation of all outward signs of vitality, are curious and interesting. When punctures are made in the limbs or heart, contractions follow, and in some cases alternate contractions and relaxations continue for some time. The most astonishing experiments of this kind are, however, those made by the agency of galvanism on the human body. The appearances produced by it are of the most frightful nature, and awaken horrible fancies on the mind of the spectator; — the eyes roll wildly, and the countenance is distorted with ghastly grins, whilst the limbs move in forcible and convulsive actions. The most successful effort to resuscitate by galvanism, was that made on the body of John White, who was executed for a murder at Louisville.

The particulars are given in the Annals of Electricity. The body, after hanging twenty-five minutes, was cut down, and, whilst yet warm, and even trembling, was subjected to

the stimulus of galvanism. The man suddenly rose from his bench to a sitting posture, afterwards stood on his feet, opened his eyes, and gave a terrific screech. His chest worked as if in respiration. One of the surgeons present exclaimed that he was alive. On another shock being given, he jumped up with a sudden bound, disengaged himself from the wires, and ran into a corner of the room. He frequently opened his eyes, and the breathing became so regular, that many addressed him, but he made no sign of understanding. Nevertheless, by the assistance of a medical student, he took a few steps on the floor, and seated himself in an arm-chair. He seemed like a man intoxicated, and overcome with the exertion he had made. Every effort was put in practice to equalise the circulation; but congestion of the brain eventually came on, and terminated his existence. A man of the name of Clydesdale, who was executed for murder at Glasgow, was also made the subject of a similar experiment.

In respect to the application of stimulants,

it is not likely that the more powerful, such as electricity or galvanism, will be made use of by any other than medical men; and this mode of testing the continuance of life is therefore more interesting in a physiological point of view, than useful in its practical application. Cold water to the face and sinapisms to the feet are often employed in the last moments of life,—if not to test the existence of vitality, at least to act as curative agents.

When Putrefaction commences, there can, of course, be no longer any doubt of the departure of life,—premising, that the putrefaction is general, and not of a local kind. There is nothing more appalling and humiliating than the decomposition of the dead;

> "Before Decay's effacing fingers
> Have swept the lines where Beauty lingers,"

we may, indeed, persuade ourselves, that the dead are only silent and unmovable; but when changes gradually manifest themselves, and we can no longer recognise the familiar features

we have so often looked upon, we see the greatness of that alteration, and feel what it is to die.

Shall we "look upon those lips that we have kissed we know not how oft," pale, cold, and repulsive, and not experience the immensity of this change!

The peculiar cadaverous odour of the body is well known to most people, and the appearances of incipient putrefaction need no explanation. The finer changes are, perhaps, best indicated by the flaccidity of the cornea, and the loss of transparency in the eye. These can seldom be mistaken by medical men, though death may undoubtedly take place before they are strikingly apparent. Amongst other indications of decomposition, the gravitation and transudation of the blood to the surface on which the body lies, are important subjects for consideration, because they have been mistaken by persons ignorant of such matters for indications of injuries and bruises.

They often present very singular lines and marks, and have certainly a very close resemblance to the extravasations produced by blows. These marks have been termed sugillations, — the term sugillation is rather an awkward word, but it is derived from the Latin *sugillatio*, which signifies a black mark. Several instances are recorded of their being mistaken for the ecchymoses produced by blows.

Belloc relates an instance where a woman, who was pregnant, was ill-treated by her husband, who kicked her on the thigh and abdomen. She subsequently fell ill of the small-pox, and died. The second day of the fever she had an abundant hæmorrhage from the nose, the blood being *dissolved and black* (*dissous et très noir*). She died covered with sugillations, and some traces of the small-pox. It then became a question, whether she had died from violence. The body was exhumed for the purpose of inspection, but the medical men who made the examination concluded that her

death was the result of the epidemic small-pox.*

Beck, in a note, quotes a case from Phillips's Law of Evidence, of a John Stringer, who was tried for the murder of his wife, in the year 1765. It appeared that they had often quarrelled; and a young surgeon gave it as his opinion that the marks found on the body had the appearances of mortification produced by bruises. The man was found guilty; but a Mr. Carsan, an eminent surgeon, who had from mere curiosity also examined the body, was convinced that the marks were those of incipient putrefaction; and on the case being fairly represented to the Archbishop of Canterbury, a complete pardon was eventually obtained.†

Sugillations may be distinguished from ecchymoses, by their being found only on the more dependent parts of the body, or those which *have* already been dependent, and from

* Belloc, Cours de Médicine Légale, p. 318.

† Medical Jurisprudence, p. 492. Edit. for 1838.

their not being accompanied by corresponding *subcutaneous extravasations.* In the case of sugillations, therefore, if the skin be fairly divided, the livid appearance will not be found traceable to any more deeply-seated cause. The blood, too, in the case of sugillations is thin and fluid from its decomposition; whereas, in the lividity from blows, clots are commonly found beneath the spot indicated. But the effects of gravitation are not only to be taken into consideration in estimating the external appearances of the body, but also in considering the internal parts; and this is of great consequence in the appreciation of the appearances supposed to be the result of disease.

Sometimes discolourations of the body after death assume the appearance of stripes, as if the subject had been previously beaten. The term *Vibices* (*vibex*, a stripe) has been adopted to express this appearance. Certainly, any one not previously aware that such marks are common, would be strongly tempted to suppose that they were produced by flagellation. It seems

that these marks are caused by the dress and wrappings of the corpse causing the transudation of the blood to be determined to particular parts.

In the year 1837, M. P. Manni, professor in the University of Rome, offered to the Academy of Sciences, to place at its disposal the sum of 1500 francs, to be given to the author of the best memoir on the question of apparent death. In the same year the Academy proposed the following questions on the subject for a prize: 1. What are the distinctive characters of apparent death? 2. What are the means to prevent premature interment?

It was not until the year 1846 that any memoir appeared which was considered worthy of the prize; and it was then adjudicated to M. Bouchut, whose treatise is now before the public.*

It appears from M. Bouchut's able researches,

* Traité des Signes de la Mort, et des Moyens de prévenir les Enterrements prématurés. Par E. Bouchut, Paris, chez J. B. Baillière, 1849.

that the *sounds* of the heart, as indicated by the stethoscope, are never entirely wanting, except in real death; and that the longest interval between the last beats of the heart is about six or seven seconds. These, therefore, are very important points in ascertaining the departure of life at the earliest possible period. The remarks of M. Bouchut are indeed such as must naturally recommend themselves to our reason; but he is the first who has fairly made the state of the heart in apparent death the subject of direct observation and experiment.

M. Bouchut further insisted on the complete dilatation of the pupil as a corroborative sign of death, remarking that, though contracted in the death struggle, it afterwards and speedily becomes dilated; so truly may we say that, "la pupille est la fenêtre de l'ame."

It would seem, then, that the indications of death are sufficiently marked to render it improbable that premature interment can often take place; and whenever this occurs, it must

be the result of great carelessness, ignorance, and haste.

Even the alterations which take place after the body is committed to the grave, have engaged the attention of medical inquirers, and M. Orfila, in his treatise on Judicial Exhumations, has brought forward much curious matter respecting them. It is not very probable that the features of the dead can be recognized after fourteen or fifteen days' interment; and in three or four months all vestiges of the face are destroyed.

In cases, however, where pains are taken to exclude the air, the preservation may be wonderfully protracted; and on this point I may add some very interesting particulars relative to the posthumous examination of the body of Charles I.

Until a recent period, doubt had been entertained as to the precise spot where the remains of Charles I. were buried.

In the progress of some alterations which were made in connexion with the tomb-house

of St. George's Chapel, an aperture was accidentally made in Henry VIII.'s vault, through which the workmen saw two coffins, supposed to contain the bodies of Henry VIII. and Jane Seymour, and a third covered with a black velvet pall which, from Mr. Herbert's narrative (Athenæ Oxonienses), was conjectured to contain the body of Charles I.

By the desire of the Prince Regent, and in his presence, an examination of this latter was made on the 1st of April, 1813. On removing the pall a plain leaden coffin was discovered, on which were inscribed, in large letters, King Charles, 1648. A square opening was made into the upper part of the lid, and through this a wooden coffin was seen, very much decayed, inclosing the body, carefully wrapped up in cere-cloth. It appeared that a quantity of greasy and resinous matter had been melted into the coffin so as to fill it completely, and exclude the air. It was not an easy matter to detach the cere-cloth from the body, except at such parts as were covered with unctuous

matter, and these presented a correct impression of the features to which they had been applied.

When the face was at length uncovered, it presented a dark discoloured appearance, but the forehead and temples had lost nothing of their muscular substance, and the face was long and oval. The cartilage of the nose was gone; the left eye was open and full when first exposed, but it rapidly vanished. The pointed beard, so characteristic of this period, was perfect. Many of the teeth remained, and the left ear was found entire. It was impossible not to perceive the likeness which still remained to the coins and busts, and especially the pictures of the king by Vandyke. When the cere-cloth was sufficiently disengaged, the head was found loose and detached from the body; the hair was thick at the back part of the neck, and had been apparently cut short for the convenience of the executioner. At first it seemed black, but when cleaned and dried, presented a beautiful brown colour.

The fourth cervical vertebra was cut transversely and smoothly, as if from a heavy blow of a sharp instrument. The examination having proceeded thus far, was thought to be sufficient to identify the body, and the head was immediately restored, and the coffin soldered up again. The other coffins were not disturbed; but the larger one, which is believed to have contained Henry VIII., and was six feet ten inches in length, was beaten in, as if by violence, and its outer wooden covering was decayed, and in small fragments. Through the opening the skeleton of the king might be perceived, but there was nothing found of a discriminative character, and no inscription on the coffin. It is supposed, that the coffin of King Henry had been injured by the precipitous introduction of that of King Charles, at a period when little respect was paid to the remains of monarchs. It may be interesting to add, that a very small mahogany coffin, covered with crimson velvet, lay on the pall which covered King Charles, and contained

the still-born child of the Princess George of Denmark, afterwards Queen Anne.*

If the fear of premature interment be not unnatural, the fear of death itself is obviously less so.

In some cases, however, illness gradually removes this dread, and the change is welcomed, and even earnestly desired; the sufferer has ceased to take an interest in the things around him: they have lost all the charms they borrowed from hope and anticipation, and he has no future earthly prospect but the grave.

But even where the act of dying is dreaded, there are many who would not altogether be ignorant of the change. I have known people express a strange fear of dying whilst they are asleep. I was once earnestly asked by a patient who was on her death bed to awaken her if I thought she was dying. I should imagine that this fear was not uncommon; for I have heard it named more than once

* See Sir H. Halford's Essays.

in my own experience. In a very interesting memoir of Mr. Edgeworth, a part of which is autobiographical, the writer states that his wife expressed this dread; but, alas! the sleep of death is one from which we cannot awaken our dearest friends!

"Three days before she died," says Mr. Edgeworth, "I was suddenly called up to her room. I found her in violent convulsions. Youth, beauty, grace, charms of person and accomplishments of mind, reduced to the extreme of human misery, must have wrung the most obdurate heart. What must her husband feel at such a moment? I felt her pulse, and whispered, 'You are not dying;' she looked at me with an effort of resolution and kindness to thank me.

* * * * * *

"She soon fell asleep, and awakened smiling. 'I am smiling,' said she, 'at my asking you to sit beside me as a sort of protection, and at my being afraid to *die in my sleep*, when I never felt afraid of dying when awake.'"

Sometimes consciousness remains to the last moment of existence, and even when the tongue refuses to speak, the wistful eye and wave of the hand serve to impress the dying injunction. How beautifully and truly is this pictured in the story of Lefevre, where the poor soldier looks first at his son, and then at my Uncle Toby; "and the ligature, fine as it is, was never broken!"

When death is inevitable, it becomes the duty of a medical man to consider the propriety of informing his patient of his condition. The subject is very ably treated in a paper by Sir H. Halford; and written in his usual classical style. Sir Henry thinks it desirable that the physician should make known his opinion rather to the friends than to the patient, and allow the friends themselves to be the means of communicating the intelligence to the sick. "They do so," he says, "without destroying his hopes, for the patient will still believe that he has an appeal to his physician beyond their fears; whereas, if the

physician lay open his danger to him, however delicately he may do this, he runs a risk of appearing to pronounce a sentence of condemnation to death, against which there is no appeal." * Sir H. Halford goes on to say, "that in the case of his late majesty (alluding to George IV., who died on the 25th of June, 1830), the Government and the royal family were informed, on the 27th of April, that his majesty's disease was seated in his heart, and that an effusion of water into the chest was soon to be expected. It was not, however, until the latter end of May, when his majesty was so discouraged by repeated attacks of embarrassment in his breathing, as to desire me to explain to him the nature of his complaint, and to give him my candid opinion of its probable termination, that the opportunity occurred of acknowledging to his majesty the extent of my fears for his safety. This communication was not necessary to suggest to

* Influence of Disease on the Mind, Essays and Orations, p. 83.

the king the propriety of religious offices, for his majesty had used them daily; but it determined him, perhaps, to appoint an early day to receive the sacrament. He did receive it with every appearance of the most fervent piety and devotion, and acknowledged to me repeatedly afterwards, that it had given him great consolation, true comfort. After this, when 'he had set his house in order,' I thought myself at liberty to interpret every new symptom, as it arose, in as favourable a light as I could, for his majesty's satisfaction; and we were enabled thereby to rally his spirits in the intervals of his frightful attacks, to maintain his confidence in his medical resources, and to spare him the pain of contemplating approaching death, until a few minutes before his majesty expired."

The changes which immediately precede death are, of course, more or less painful, according to their nature and severity; yet there can be no doubt but that dissolution itself is the cessation of suffering. In some

instances the approach of death is betokened by strange and awful sensations; and it is probable that where consciousness remains to the last, the feelings are always peculiar and unmistakeable.

These premonitions of death often give rise to a degree of restlessness, and a wish for change, which is odd and capricious in its manifestations. Persons who have long remained tranquil will suddenly express a desire to be dressed and go down stairs, or have their beds moved to another position. Strange yearnings for particular places and old scenes sometimes arise, which seem like the shadowing forth of dim instincts, which have been concealed in the recesses of the mind. How painfully must such longings have been felt when death has hovered over the couch in the wild and inhospitable districts of the tropics, or the frozen regions of the extreme north!

With the exception of those who are worn down by long illness, or reduced to despair by mental anguish and misfortune, there are few

who can believe that they have accomplished all the purposes of life; and we naturally look forward to the infirmities of old age to wean us from the interests of the world. But even then we are reluctant to leave; and it is only when deserted by friends, that we can say in the words of the poet,—

> "I have liv'd long enough; my way of life
> Is fall'n into the sear — the yellow leaf."

In speaking of others it is common to regard life as properly terminating when usefulness, activity, and fortune are declining. When, reverses succeed a happy and prosperous career, we say that existence has been too protracted: it is on this account that the poets have spoken of the happiest moment of life as the most proper time for death; a notion certainly more poetical than rational. Thus, in Don Juan, Byron says, speaking of his lovers, —

> "Why did they
> Then not die? — they had liv'd too long
> Should an hour come to bid them breathe apart."
>
> Canto IV. v. 28.

And Shakspeare makes Othello exclaim:—

"If I were now to die,
'Twere now to be most happy; for I fear
My soul hath her content so absolute,
That not another comfort like to this
Succeeds in unknown fate."

I might bring forward many other illustrations of the same kind, but it would only be to digress. There is, in truth, in many minds a fearful presentiment that great happiness cannot be of long duration; but if the prosperous periods of life are those which seem to form the natural climax and terminating point of life, they are those in which we could least bear the loss of others. The sudden removal of one who is in the very midst of his usefulness, in whose success we had "garnered up our hearts," creates a revulsion of feeling which poor humanity can ill support. The consolations of religion are the only consolations which deserve the name, and it is the idea alone that separation is temporary, that can stem the torrent of overpowering grief.

It is the anticipation of a re-union hereafter which throws the only ray of light that can penetrate the gloom of the mourner's mind. He is yet to have a meeting beyond the grave; and whilst this idea mitigates grief, it renders the prospect of death itself less terrible. It was in this way that Mrs. Garrick endeavoured to remove the terrors of death, after the loss of the great actor.

On the 20th of April, 1781, Boswell writes, "Mrs. Garrick had this day, for the first time since his death (her husband's), a select party of his friends to dine with her. The company were Miss Hannah More, who lived with her, and whom she called her chaplain; Mrs. Boscawen, Mrs. Elizabeth Carter, Sir Joshua Reynolds, Dr. Burney, Dr. Johnson, and myself. We found ourselves very elegantly entertained at her house in the Adelphi, where I have passed many a pleasing hour with him 'who gladdened life.' She looked well, talked of her husband with complacency; and while she cast her eyes on his portrait which hung over the chimney-

piece, said that 'death was now the most agreeable object to her.'"

The uncertainty and brevity of life would furnish fit topics for medical as well as for moral reflection. How often must they present themselves to the physician's mind!—Sometimes he meets death in early tender infancy;—sometimes in robust manhood;—sometimes in feeble old age;—sometimes in the sudden apoplexy;—sometimes in the wasting consumption.

As he looks upon the aged sufferer, he must often call to mind how transient are youth and beauty, and the boast of manly strength and of womanly elegance.

It is with something of this feeling that the following passage will be read which I extract from Andersen's Story of My Life.

As a little boy, Andersen had formerly seen the great actress, the Donau-weibchen, at the theatre of Odense. He saw how much she was honoured, and the homage that was paid to her. "Many years afterwards," says he,

"when, as a student, I visited Odense, I saw in one of the chambers of the Hospital, where the poor widows lived, and where one bed stood by another, a female portrait, hanging over one bed in a gilt frame.

"It was Lessing's Emelia Galotti, and represented her as pulling the rose to pieces; but the picture was a portrait. It appeared singular in contrast with the poverty by which it was surrounded.

"'Whom does it represent?' asked I.

"'Oh,' said one of the old women, 'it is the face of the German lady who was once an actress.' And then I saw a little delicate woman, whose face was covered with wrinkles, and in an old silk gown that once had been black. This was the once celebrated singer, who, as the Donau-weibchen, had been applauded by every one."*

But if life is but brief and vain in the retrospect of age, how shall we speak of it with the uncertainties of the most promising career?

* Hans Christian Andersen's Story of My Life, translated by Mary Howitt, p. 114.

In the spring of 1781, all the talent and fashion of London had been invited to the town-house of Mr. Thrale in Grosvenor square, to partake of a sumptuous entertainment. On the dawn which followed that very night, the owner of the mansion had terminated his existence in an attack of apoplexy. — The same catastrophe, perhaps, now awaits many who are looking to the future with equal joy and with equal promise.

The *bodily changes* which immediately precede, and, in some sense, may be said to constitute, death, deserve and repay consideration. It might seem, on a first attention, that the modes in which death takes place are so various, and the diseases to which the human frame is liable so numerous, that it would be impossible to reduce the subject to any simple and practical form of inquiry.

It will be found, however, on a more intimate acquaintance, that much advantage may be gained by classification and arrangement,

and a sort of analysis made which requires no forced construction, and no metaphysical nicety.

Death may indeed be said to *begin* at different parts of the body, according as they are severally the first to suffer those irreparable and grave changes which issue in the destruction of life. It will be found that the nature, symptoms, and peculiarities of the act of dying, are determined by the organ first mortally attacked; so that, by considering the subject in relation to these parts, we are assisted in arranging our ideas.

The alterations which directly occasion dissolution seem principally effective, either in the arrest of the *circulation* or the *respiration;* and the manner in which they tell in producing these effects, will now, therefore, briefly, come under our consideration.

As the heart is the great mover of the circulation, we can easily conceive that whatever brings it to a stop must be fatal to life. Extensive losses of blood operate in this manner,

and they furnish us with a good illustration of the manner in which death takes place. The sufferer becomes pale and faint, his lips white and trembling; after a while the breathing becomes distressed, and a rushing noise seems to fill the ears. The pulse is soft, feeble, and wavering; and the exhaustion and prostration are more and more alarming. Soon a curious restlessness arises, and he tosses himself from side to side. At length the pulse becomes uncertain, and the blood is feebly thrown to the brain. The surface assumes an icy coldness. The mind is yet untouched, and the sufferer knows himself to be dying. In vain the pulse is sought at the wrist—in vain efforts are made to re-excite warmth—the body is like a living corpse. Now a few convulsive gaspings arise, and the countenance sets in the stiff image of death. Such are the more striking phenomena which attend the fatal hæmorrhages.

The failure of the vital powers, from the withdrawal of blood, may be regarded as a sort of type of this mode of death, since the various

symptoms which have been named, arise from the cessation of the healthy circulation.

A dread of the loss of blood may almost be considered as an instinctive feeling; at any rate its importance is early impressed on the mind, and is never forgotten. In childhood it is looked at with alarm; and the stoutest mind cannot but view with horror those perilous gushes of blood which bring us into the very jaws of destruction.

The description which Byron gives us of Manfred's death, may be considered as a highly poetical representation of the state we have portrayed.

"*Abbot.* Alas! how pale thou art—thy lips are white—
And thy breast heaves — and in thy gasping throat
The accents rattle — Give thy prayers to heaven —
Pray — albeit but in thought, — but die not thus.
Manfred. 'Tis over — my dull eyes can fix thee not;
But all things swim around me, and the earth
Heaves as it were beneath me. Fare thee well —
Give me thy hand."

Gradually exhausting complaints, such as interfere with the nutrition of the body, act

much in the same manner as direct losses of blood, but obviously more slowly. Privations of various kinds and wasting complaints which impair the general strength, tell at last, in exhausting the heart's power, and life terminates in the gradual failure of the circulation of the blood. In chronic ailments, the weary sufferer feels the extreme exhaustion which months and years of suffering have produced. He cannot lift himself in bed—he fears to raise his head, and can scarcely grasp the extended hand of friendship, or return the pressure of affection. The heart's power is at last fatally depressed.

The following, which is quoted from Thackrah's work on Digestion and Diet, is extracted from Hufeland's Journal, and gives an interesting picture of the effects of extreme abstinence. "A German merchant, æt. 32, depressed by severe reverses of fortune and consequent slights of his relatives, formed the resolution of destroying himself by abstinence. With this view he repaired on the 15th of September, 1818, to an unfrequented wood, where he con-

structed a hut of boughs, and remained without food till the 3rd of October following. At this period he was found by the landlord of a neighbouring pothouse, still alive, but feeble, speechless, and insensible. Broth, with yolk of an egg, was given him. He swallowed it with difficulty, and died immediately. In the pocket of the unfortunate man was found a journal written in pencil, singular in its kind, and remarkable as a narrative of his feelings and sentiments. It begins thus: — "The generous philanthropist who shall one day find me here after my death, is requested to inter me; and, in consideration of this service, to keep my clothes, purse, knife, and letter-case. I moreover observe that I am no suicide, but have died of hunger, because, through wicked men, I have lost the whole of my very considerable property, and am unwilling to become a burden to my friends." The ensuing remark is dated Sept. 17th, the second day of abstinence. "I yet live; but how have I been soaked during the night, and how cold has it been! O God!

when will my sufferings terminate! No human being has for three days been seen here — only some birds." The next extract continues — "And again three days; and I have been so soaked during the night, that my clothes to-day are not yet dry. How hard is this, no one knows; and my last hour must soon arrive. Doubtless during the heavy rain a little water has got into my throat, but the thirst is not to be slaked with water; moreover, I have had none even of this for six days, since I am no longer able to move from the place. Yesterday, for the first time during the eternity which, alas! I have already passed here, a man approached me within the distance of eight or ten paces. He was certainly a shepherd; I saluted him in silence, and he returned it in the same manner. Probably he will find me after my death! Finally, I here protest before the all-wise God, that notwithstanding all the misfortunes which I have suffered from my youth, I yet die very unwillingly; although necessity has imperiously driven me to it. Never-

theless, I pray for it. — More can I not write for faintness and spasms; and this will be the last. Dated near Forest, by the side of the Goat public-house, Sept. 29th, 1818. — J. F. N."

Stories are related of persons remaining months, and even years, without food; but they are unworthy of belief. It is not probable that life can be continued many days without food; and a week is perhaps an average period, if fluids also be withheld. In the hospitals for the insane, instances are sometimes met with of obstinate refusal of food, and in these cases of insanity it seems that the abstinence is better tolerated. In the brute creation fasting is more endurable. Müller says, referring to Tiedemann, that salamanders, tortoises, and gold fish may be kept for years without food; some birds from twenty-five to twenty-eight days; and dogs for twenty-five to thirty-six days.

Some time after I had entered into the medical profession, but whilst yet a pupil, I was in-

vited by a fellow-student to dine with him. Whilst we were chatting together after dinner, we fell into conversation respecting a man who had recently died from an extensive burn. The gentleman's father, who was an intelligent man, overheard our remarks, and joining in the conversation, asked me to explain to him how it happened that the burn occasioned death.

I attempted an explanation, but soon felt my incompetence to offer a satisfactory reply, and I was not a little surprised to find myself foiled in what I considered the simplest possible matter; for I had imagined, before I attempted the explanation, that the subject did not require a moment's consideration. I remember that my fellow-student was equally unsuccessful. It seemed curious to me at the time, that I should hesitate in rendering a reason for a fact which so frequently presents itself to the medical inquirer.

The phenomena, however, which are the most familiar to us, are often the last to challenge our attention.

Now, independently of the mere loss of blood, other causes may depress the action of the heart.

The heart's action may be arrested by what is called a *shock*. It is not easy to explain in what manner it acts, nor to define the meaning in a precise manner; but every one knows what is meant by it. A shock is a sudden impression on the nervous system. It plays an important part in many cases of violent death, and in those remarkable instances of disease in which life is extinguished with fearful rapidity.

There are many accidents in which there is little loss of blood; and yet the injury is great, and its consequences terrible. The sufferer turns pale—his countenance changes, and he feels that he is fatally wounded. Sickness and complete prostration follow, and the heart never rallies. In this manner, extensive burns and scalds, and dreadful blows, or internal lacerations produce death. In the same way the strong mineral acids, when taken internally,

appear to destroy, by their depressing influence on the heart.

The internal lesion of the stomach causes a sympathetic failure of the circulation.

But the effects of *shock* are much more numerous and interesting than might at first be imagined. At least, impressions on the nervous system, analogous in their nature, play an important part in the fatal termination of many diseases. Violent inflammations seem, when fatal, to act by their depressing influence.

We do not see, *à priori*, any actual reason why these inflammations should be productive of death; but we know it to be an ultimate fact that they operate in lowering the vital powers, and bringing the circulation to a stand.

Amongst the instances of fatal collapse there are none more striking than those which arise from perforating ulcers. Insidious disease may go on, in persons having every appearance of health, and be suddenly fatal by ulceration of the stomach or bowels, and the escape of

their contents into the abdominal cavity. The apertures produced by the perforating ulcers are often singularly defined, and resemble the holes cut out by a punch or sharp circular instrument. The fatal issue of these lesions is generally so unexpected, so rapid, and so painful, as to suggest the idea of poisoning, or of *hernia.*

My late and valued friend, Dr. Howard, related to me a case, which, at the time, made great impression on his mind.

On the 10th of February, 1845, Dr. Howard was requested to visit a young woman who was taken suddenly ill at a factory in Manchester. When he got there, he found her lying on the floor with a pale, sunken countenance, a weak pulse, and a cold surface. She spoke in a feeble whisper, and was too much exhausted to reply to many questions, but by her gestures she indicated that she had pain in her stomach. It appeared that she had been taken ill about three o'clock. Dr. Howard recommended that she should be taken to the Infirmary, and she died there, in about twelve

hours after her removal. It was thought at the Infirmary that she had taken poison, but on examination of the body after death, a round hole was found in the stomach, such as is produced by a perforating ulcer. The edges of the ulcer were smooth and even.

One or two such instances have fallen under my own notice, and must be met with in the course of the experience of every medical man.

Fatal fainting is not unfrequently the result of actual disease of the heart, although death from affections of the heart is not always of a sudden or uncomplicated kind. The walls of the heart are sometimes thin and dilated, and there is a soft struggling palpitation which has been aptly compared to the fluttering of a bird against the bars of its cage.

At other times the heart is overloaded with fatty deposits, so that its natural fleshy structure is proportionally defective. In very inordinately fat people the heart is often found in

this state, and is unable to propel the blood with sufficient force to meet the exigencies of the system. Occasionally, bony deposits are found in the heart and great vessels, and the natural contractions of the heart are painful and irregular. From these, and other causes, which probably produce a spasm of the heart, arises the disease called *angina pectoris.*

The celebrated John Hunter died of this disease, and it is well known to be suddenly fatal. Sir Everard Home tells us that, "On the 16th of October, 1793, when in his usual state of health, he went to St. George's Hospital, and meeting with some things which irritated his mind, and not being perfectly master of the circumstances, he withheld his sentiments; in which state of restraint he went into the next room, and turning round to Dr. Robinson, one of the physicians of the hospital, he gave a deep groan, and dropped down dead."

The sudden death of the benevolent and highly accomplished Dr. Arnold, as represented

by his biographer, may serve as a further illustration of the angina pectoris. It was between five and six o'clock on Sunday morning that he awoke with a sharp pain across his chest, which he mentioned to his wife on her asking whether he felt well, adding that he had felt it slightly on the preceding day, before and after bathing. He then again composed himself to sleep; but Mrs. Arnold watched him with extreme anxiety, and was soon led to infer that he was seriously ill. The pain seemed to increase and to pass down the left arm, which called to Mrs. Arnold's remembrance what she had heard of this fatal disease. About a quarter to seven Dr. Bucknill (the son of their usual medical attendant) visited him. "He was then lying on his back—his countenance much as usual —his pulse, though regular, was very quick, and there was cold perspiration on the brow and cheeks." He apologised in a cheerful manner for troubling Dr. Bucknill at so early an hour, and then proceeded to in-

quire as to the nature and danger of his illness. After the physician had informed him that his complaint was a spasm of the heart, and answered the questions which were proposed, he quitted the house to furnish himself with the necessary remedies. On his return, Dr. Arnold said, "If the pain is again as severe as it was before you left, I do not know how I can bear it." He again questioned Dr. Bucknill as to the danger of his complaint, and in such a manner that it was impossible to avoid telling him the truth. He afterwards inquired as to the remedies to be adopted, and on being told, answered "Ah! very well." The physician, who was dropping the laudanum into a glass, turned round and saw him looking quite calm, but with his eyes shut. In another minute he heard a rattle in his throat, and a convulsive struggle, flew to the bed, and called to one of the servants to fetch Mrs. Arnold. The family soon arrived; but the sobs and cries of his children were unable to affect him—"the eyes were fixed, the countenance was unmoved: there

was a heaving of the chest, deep gasps escaped at prolonged intervals, and just as the usual medical attendant arrived, and as the old school-house servant, in an agony of grief, rushed with the others into the room in the hope of seeing his master once more, he breathed his last."* This occurred shortly before eight in the morning. His biographer continues, "What that Sunday was in Rugby, it is hard fully to represent,—the incredulity,—the bewilderment,—the agitating inquiries for every detail,—the blank, more awful than sorrow, that prevailed through the vacant services of that long and dreary day,—the feeling as if the very place had passed away with him who had so emphatically been in every sense its head,—the sympathy which hardly dared to contemplate, and which yet could not but fix the thoughts and looks of all on the desolate house, where the fatherless family were gathered round the chamber of death."

* Arnold's Life, vol. ii. p. 337.

In Dr. Arnold's case, the heart was found soft and thin, but without any valvular disease. A great many more cases might be cited in illustration of this interesting disease, but I shall content myself with one which I take from Dr. Latham's excellent "Clinical Lectures on Diseases of the Heart."

"N. P. was about fifty-five years of age. He had filled a high judicial office in India, and when his stated period of service had expired, he returned home with unimpaired health. Ten years had wrought little change in his person, except that from having been thin and muscular, he was slightly tending to fat and corpulency.

"He had now been more than a twelvemonth in England, and had taken up his residence in Hampshire, and was in the enjoyment of his wonted health, when one day after a morning's shooting, without any extraordinary fatigue or exertion, he felt at dinner an unusual pain in the region of his heart. The pain was not extreme, but enough to make him leave the

table, and retire into his library. Warm applications were made to the chest, and the pain soon ceased altogether. He then begged that he might be left alone to repose until tea-time. In less than an hour his wife returned into the room, and found him lying upon the sofa, just in the position she had left him.—She believed him asleep, but found him dead. The examination of his body (continues Dr. Latham), as it was reported to me, disclosed nothing that could account for his death, but a thin fat heart; fat was deposited on it at the expense of its muscular substance." *

Besides disease of the heart itself, we may have disease of the great blood-vessels,—what is called Aneurism. Sometimes these diseases of the blood-vessels are very obscure; often they originate on the great vessel, the *aorta*, which arises immediately from the heart. Dr. Farre described to Dr. Watson a case which inculcates the necessity of attending minutely to

* Latham's Clinical Medicine, vol. ii. p. 388.

what a patient says. A man consulted Dr. Farre, having just been told by another physician that he was fanciful, and that there was nothing amiss with him.

Dr. Farre was very particular in his inquiries at every visit he paid, so much so, indeed, that the man became vexed and said pettishly, "I know, that if you split me down the middle, I am sound on my right side and diseased on my left." This was unfortunately too true: he was found dead in bed a short time afterwards.* I remember a man who came regularly as an out-patient to the Manchester Infirmary, complaining of pain in the shoulder; I supposed at first that he had rheumatism, but one day I told him to strip off his coat, and then I found that he had an aneurism of the subclavian artery, of which he subsequently died. I need scarcely say that these cases of aneurism are fatal, much as disease of the heart itself. The blood-vessel at length gives way, and the patient dies from

* Vide Watson's Lectures.

the escape of blood and the fatal fainting which ensues.

Some attention has been given by medical men to the state in which the blood is found to be distributed after death. The heart contains several cavities, through which the blood is progressively received and expelled. Where the arrest of the circulation has commenced, however, in the heart itself, it is obvious that the cavities will be pretty equally affected, and that we shall not find one side to be gorged with blood whilst the other is empty. The subject will again come before us when we treat of the next division of this subject, in which it will be seen that unequal distributions arise from another species of death.

The mode of death which has been described is not one of pain. It may have been preceded by considerable suffering, as in the case of burns and scalds. But the act of dying is one of relief; or if the sensations are uneasy and fearful, they cannot be called painful in the common sense of the term.

I now come to speak of another mode of death, which has been called, but not very correctly, *Asphyxia*. In the cases which I have previously described, the first great or palpable interference with the continuance of life, has been the failure of the heart— so that actual death may be said to have begun at the heart. I have further to consider the cases where death begins at the lungs. Important as it is that the blood should be circulated through the body, it is of equal importance that it should be in a state of purity. In order to maintain its purity, it is essential that it should be exposed to the air in the lungs.

The existence of air is so well known to be necessary for life, that the term *expire*, which signifies to breathe out, is also adopted to express the act of dying. The symptoms which attend asphyxia vary considerably from those previously described. They are, obviously, more or less protracted according as the cause operates with greater or less severity.

When the breathing is largely obstructed, the complexion becomes dark, and the lips bluish —the veins turgid and prominent, and the face bloated and enlarged. After a time the brain is confused, and stupor creeps on, whilst the air is with difficulty sucked through the accumulated secretions of the air passages.

The blood becomes thus gradually more and more perverted, until at length its circulation through the lungs is rendered difficult or impossible. The heavy gurgling respiration gradually passes into a state of extreme effort;—now the breathing seems stopped, and now a deep inspiration again lights up the mechanism of the body, but life eventually fails, as the blood ceases to circulate. All causes which operate in preventing access of air to the lungs may occasion death. Thus drowning, strangling, and suffocation from gaseous exhalations, are fatal, by obstructing the purification of the blood.

In general, this mode of death is not so rapid as that which has just been described,

but occasionally it is very brief. In drowning, it does not seem that life can be preserved more than three or four minutes, that is, when submersion is complete. The respiration may, no doubt, be somewhat longer suspended when fainting ensues, for then the circulation, being temporarily arrested, the necessity for air is less urgent. The accounts which are given of persons remaining alive for hours under water cannot be trusted to.

The access of air to the lungs may be immediately prevented by inflammation of the windpipe, as in the case of croup, or, still more strikingly, by spasmodic affections.

The complaint known to medical men by the name of Laryngismus stridulus, is, in this manner, suddenly fatal to infants.

Some diseases of the lungs are so gradual in their progress, that the quantity of blood in the body becomes diminished in proportion to their limited capacity for respiration. Hence the balance is so finely preserved to the last, that death takes place with great difficulty. I

have sat for hours beside patients in the last stages of consumption, and watched the emaciated and dying frame alternately reviving and sinking until the patient himself became fearful that he should never die. It is erroneously imagined that death in consumption is always easy: fortunately it may be so in some cases; it is very much otherwise in most.

Mechanical obstructions are well known to occasion death by impeding the breathing. Pieces of meat or other bodies may get impacted in the wind-pipe, and cause death before they can be removed.

I remember an instance of this sort which occurred in the market-place in Manchester. A woman, whilst eating an oyster, fell into a fit of laughter, when she was suddenly observed to become livid in the face, and shortly afterwards died of suffocation. The oyster was found partly fixed in the upper part of the windpipe.

There is an interesting and instructive case of the same nature related in the Lancet. A man,

who had just been married, got into a dispute with one of his own party, and was knocked down by a blow. Eventually he was able to rejoin his party; but it was observed that whilst engaged at his dinner he hastily got up and went out of the room. A friend followed him, but immediately returned to announce that the man was dead. On examining the body after death, a surgeon pronounced that he had died from apoplexy, and attributed the fit to the injuries he had received in the quarrel. The coroner, Mr. Wakley, asked the surgeon if he had examined the windpipe. The surgeon confessed that he had not done so; whereupon he was desired to complete the examination. He repaired presently to perform his task, and on his return stated that he found a piece of meat wedged firmly in the *glottis*. Thus death had, in reality, arisen from this source; and the congested state of the brain was the effect of impeded respiration, and not the first occasion of his death.

Whilst treating upon the subject of Asphyxia,

I cannot refrain from introducing some particulars of the awful catastrophe which occurred at the Black Hole at Calcutta, as they will furnish an interesting exemplification of the effects of deprivation of air. In 1756, the viceroy of Bengal laid siege to the factory at Calcutta. Mr. Holwell and the garrison carried on the defence with great spirit and bravery, but were ultimately obliged to surrender. They consisted of about 145 men and one woman. The whole of this company, many of whom were dangerously wounded, were shut up the same night in a small prison, about eighteen feet square. The prison, which was strongly built round with walls, had only two small windows at one end, which were secured by strong bars. As the prisoners had only about eighteen square inches of space for each individual, the heat and oppression soon became insupportable.

Attempts were, at first, vainly made to force open the door. Mr. Holwell, who was near one of the windows, endeavoured to reason

with the prisoners, and advised them not to exhaust their strength. This recommendation had the effect of producing some calm, but it was only temporary, for they could not long bear the frightful position, and many already were in the act of dying. Mr. Holwell then suggested that they should take off their clothes to afford more room. An effort was subsequently made to fan the air with their hats, but the exertion could not be borne. One of the company suggested that they should all kneel down, and rise up alternately. This was done several times, but many could not raise themselves when the signal was given. The situation was now frightful. The weak were trodden to death. One hour had only yet elapsed. About nine o'clock, renewed efforts were made to force the door; some became furiously delirious; others vainly sought to provoke the sentinels to fire upon them. Thirst became excessive. At last the guards gave Mr. Holwell and two of his friends some water in their hats, but it was soon spilled, and the two

friends were suffocated in the general eagerness to obtain it. Mr. Holwell was, for a long while, respected as the leader of the unfortunate assembly, but in time the natural love of life prevailed over all other feelings. The crowd eagerly pressed to the window, and, seizing the iron bars, climbed on his shoulders. He begged for his life, and giving up his position near the window, got to the other end of the dungeon; but here the air was so corrupt, that his breathing was almost impossible. He again, therefore, tried to make his way to the window over the bodies of the dead, and there he resolved to wait patiently for death. He struggled through four rows of his companions, but one row still intervened between him and the window. His thirst was excessive, and he endeavoured to allay it by sucking the moisture from his shirt. As midnight approached, the despair became unbounded and terrible; they all called out aloud for air, and then the noise suddenly ceased, and the greater part laid down and

died. A Dutchman got on one of Mr. Holwell's shoulders, and a black soldier on the other: he remained thus till two in the morning, when a marine officer forced him from his place. Mr. Holwell retired to the end of the prison, where he was soon deprived of sense. About five in the morning, the viceroy inquired if Mr. Holwell was still living; and being informed that it might be possible to recover him, if the door was immediately opened, gave commands to that effect. Unfortunately, however, the door opened inwards; and, owing to the numbers of the dead, twenty minutes elapsed before it could be accomplished. Eventually Mr. Holwell was rescued alive from a heap of the dead. At a quarter past six, 23 persons were taken away alive from 146, who had been incarcerated the night previously.

When the air which is breathed, is not, by its chemical nature, calculated for the purposes of respiration, it produces effects very similar to a deficiency of air: thus, gases, which are not

actually poisonous in themselves, cause fatal results, just as the exclusion of air altogether.

It is probable that the carbonic acid gas, which is commonly known as fixed air, *is* injurious in itself*; but it is certain, also, that its fatal effects are greatly dependent on its preventing the access of the air. Many accidents have arisen from the use of charcoal fires and stoves. Mr. Coathupe, of Wraxall, was nearly killed in making some experiments with Joyce's stove, which was absurdly imagined by the inventor to burn charcoal without contaminating the air. He closed every aperture in the room, kindled the stove, and waited for the results. In a few hours giddiness came on, with sickness and great prostration; afterwards agonising headache, throbbing of the arteries, and sense of suffocation. With difficulty he opened the window, and sought to remove the stove; but when his wife entered the room, seven hours after, he was unable to explain what

* See Christison on Poisons.

had occurred, although conscious of what was passing.

I think the charcoal fire is a favourite means of death with the French. It is stated that, in 1834 and 1835, no fewer than 360 cases of poisoning with charcoal occurred in Paris. I have read of French people sitting down coolly to note their sensations whilst breathing the deadly atmosphere, until the pen has fallen from their hands.

There is often a love story mixed with these French deaths; and we cannot but regret that affection should be so curiously mingled with deplorable irregularities of mind.

The respiration may be prevented by mechanical pressure; but no doubt, where death is produced in this manner, it is often accompanied with injuries to the internal organs. The barbarities of former times furnish us with dreadful instances of death resulting from compression of the chest. In order to oblige a criminal to plead at the bar when he refused to do so, he was sometimes stretched on his back,

whilst a large iron weight was placed on his chest, and additions gradually made until he consented to do what was required, or sank under the infliction. Even as late as the reign of George the Second, such practice has been adopted. The press yard in the Old Bailey was the site of some of these dreadful torments. From this mode of death Major Strangeways died in 1659. The story is of considerable interest. The major lived with a sister very happily in a farm, until the latter became acquainted with one Fussel, a lawyer. This gave great offence to Strangeways, who swore that he would kill him. The brother and sister, consequently, parted. Some time after, whilst Fussel was in London, he was shot whilst he sat in his lodgings. Suspicion fell on Strangeways, but difficulty was experienced in tracing the murder to him. At last the expedient suggested itself of examining all the gunsmiths in London, to discover, if possible, what guns had been lent or sold on the day of the murder. This plan only excited ridicule as

an impracticable one; but, curiously enough, the matter was thus traced to Strangeways. Strangeways refusing to plead at the bar, was sentenced, by Lord Chief Justice Glynn, "'to be put into a mean house stopped from any light, and that he be laid upon his back with his body bare, and his arms and legs stretched by cords in opposite directions; and that upon his body shall be laid as much iron and stone as he can bear, *and more;* and the first day he shall have three morsels of barley-bread; and the next shall he drink thrice of the water in the next channel to the prison door, but of no spring or fountain: and this shall be his punishment till he die.' On the Monday following, at eleven in the forenoon, the sheriffs and other officers came to the press yard, whither the miserable prisoner was presently brought. He wore a mourning cloak, beneath which he appeared clothed in white from head to foot. By the sheriffs he was conducted to a dungeon, where, after prayers, his friends placed themselves at the corner of the press, whom he de-

sired, when he gave the word, to lay on the weights! This they did at the signal 'Lord Jesus receive my soul;' but, finding the weight too light for sudden execution, many of those standing by added their burdens to disburthen him of his pain. He died in about eight or ten minutes."*

The respiration is sometimes brought to a stop by causes which operate on the brain, and the peculiarities of this mode of death are so characteristic, as to deserve consideration under a separate head.

Death may be said, in this case, to begin at the head, and the respiration comes to a stand, after a period of stupor and insensibility. This is the state which is familiarly known as apoplexy. The patient lies snoring out his existence, unconscious of the weeping friends who sit around his bed.

The phenomena of apoplexy seem to be produced by causes which obstruct the circulation

* Knight's London, vol. iv. p. 301.

in the brain, or which injure the brain itself.* The giving way of blood-vessels is the common cause of apoplexy. The patient falls into a state of insensibility and complete helplessness. He breathes with a heavy snoring noise, and a blowing of the lips may often be remarked, which has been aptly compared to the smoking of a pipe. The blood-vessels of the neck and face are gorged, and the veins are especially prominent. The pupils of the eyes are dilated, and often unequally so. Consciousness is abolished. This state continues indefinitely, but at length the breathing becomes laborious—the mucus is heard rattling in the throat—the temperature falls—spasmodic twitchings play on the countenance, and sometimes horrible distortions flit over the face: death after a time closes the scene.

The action of poisons called *narcotics* is well known to be fatal in this way: opium pro-

* What is called *pressure* on the brain is not necessary for the production of *coma*.

duces this species of death, when given in overdoses.

I have stated that the pupils of the eye are generally dilated in death by coma; but when the coma is produced by narcotics, this effect is not so common. Dr. Elliotson relates the case of a German gentleman, who was a friend of his, and who had remarkably large pupils. This gentleman took it into his head to destroy himself, and for this purpose took a large quantity of opium. After taking the poison, he mentioned what he had done, and, amongst other persons, Dr. Elliotson was sent for. Insensibility did not come on for a considerable time; and the gentleman resisted powerfully all attempts to relieve him, asserting, that if he chose to die, it was only barbarity to attempt to prevent him. At length his countenance became livid, the pulse slow, the breathing stertorous, and the pupil contracted to the size of a pin's point. The jugular vein was opened, and cold water dashed on his face. In spite of all efforts he died; and Dr. Elliot-

son remarks, "I have never seen a case recover in which the pupil was so contracted."*

Extreme cold produces death, perhaps chiefly in the way of apoplexy, by retarding the circulation, and preventing its equable diffusion on the surface of the body. That it acts, at least in a great measure, in this way would seem likely from the torpor which it occasions, and which is so commonly remarked. The effects of intense cold are well exemplified in the interesting narrative of Captain Cook, where he relates what befell Dr. Solander and Sir J. Banks on the hills of Terra del Fuego.

Sir J. Banks and Dr. Solander had been botanising, and had travelled a considerable way through swamps, when the weather, which had been fine, changed and became intensely cold and gloomy, and the wind was accompanied with snow. Finding it impossible to return to the ship before morning, they resolved to penetrate into a wood, and

* Vide Elliotson's Lect. on the Practice of Physic.

build a wigwam, and kindle a fire. For this purpose they passed through another swamp. Dr. Solander, aware of the effects of cold on the human body, from experience he had already had in Norway and Sweden, cautioned his friends against the torpor which it occasions, and conjured the company, under any circumstances, not to give way to it. "Whoever sits down," said he, "will sleep; and whoever sleeps, will wake no more." Thus admonished, they continued their journey; and they had not proceeded far, before the cold was so great as to produce the effects he had named. Dr. Solander himself was the first to experience the torpor, and entreated his companions to let him lie down. Sir J. Banks in vain remonstrated with him; and he lay down on the ground, although it was covered with snow. A black servant was affected similarly, and, in spite of remonstrance, also lay down. In a few minutes they fell into a profound sleep. Fortunately, some of the party who had been sent in advance, soon

brought intelligence that a fire had been lighted about a quarter of a mile on the way. Sir J. Banks then endeavoured to awake Dr. Solander, and happily succeeded, though he had already almost lost the use of his limbs. The poor black died, as well as another black servant who had been left with him.

In the interesting account which Barry O'Meara gives, of the residence of Napoleon at St. Helena*, he mentions that, on one occasion, Buonaparte asked him what he thought was the easiest mode of dying; and himself observed, that death by cold was the easiest of all others, because, "si muore dormiendo," one dies sleeping. In describing the Russian campaign, Napoleon further remarked, "Parties when sent out on duty in advance, abandoned their posts, and went to seek the means of warming themselves in the houses. They separated in all directions, became helpless, and fell an easy prey to the enemy; others lay

* Vide O'Meara's Residence at St. Helena, vol. i. p. 179.

down, — fell asleep — a little blood came from their nostrils, and, sleeping, they died." *

When death is produced by hanging or strangling, it may be supposed that it is brought about entirely by the exclusion of air from the lungs: in many cases, however, this mode of death is complicated by the apoplexy which arises from the pressure exercised on the blood-vessels of the neck. From these combined causes insensibility arises in a few seconds, and death follows in a few minutes afterwards.

Persons who have recovered from suspension do not commonly remember what has passed, but it may be possible to recollect some of the sensations. The celebrated poet Cowper, whose fine talents were unhappily touched with madness and melancholy, relates his own unhappy experience. It may not be uninteresting in this place to glance at the particulars which he has left us.

The death of the reader of the Journals of

* Op. Cit. vol. i. p. 192.

the House of Lords had opened a situation which Cowper was desirous to occupy, but for which, he feared that he had not sufficiently prepared himself. When the time drew near in which he was to present himself before the House of Lords, to be examined as to his competency, he became nervous and excited, and his madness came over him like a cloud. In November, 1763, he went to an apothecary's shop, and bought some laudanum with a view to put an end to his existence. This he carried about with him, and often was on the point of taking it, but his resolution as often gave way, or he was prevented by the fear of interruption. Once he thought of taking it whilst he was travelling in a coach, and once he shut himself up in his room in the Temple, and placed the laudanum by his bedside in a basin. He then got on the bed, and stretched out his hand to put the basin to his lips; but just then the key turned in the door, and his laundress's husband entered. He started up, hid the basin, and affected an air of composure.

On the day previous to that on which he was to go before the House, he resolved once more to effect his purpose; he bolted his door, and with a piece of scarlet binding attempted to hang himself. First he fixed it to some ornamental work at the corner of the bed, drawing up his feet that they might not touch the ground. The carved work gave way and the binding with it. Then he fixed it to the tester of his bed, but the frame broke and again let him down. The third time he fastened it to the angle of the door, using a chair to reach it, which he afterwards pushed away with his feet. Whilst he hung he thought he heard a voice say three times, "'T is over." When he came to himself he heard his own groans, and experienced a feeling like that of a flash of lightning passing over his whole body. In a few seconds more he found himself on his face on the floor. He immediately jumped up and got into bed: he had a red mark round his neck, and a broad crimson spot showed the stagnation of the blood under one

eye. Soon after he had got into bed he heard a noise in the dining room where the laundress was lighting a fire. She must have passed the door which was open whilst he was hanging, but did not perceive him. Presently, however, she came, having heard his fall, and supposing that he was in a fit. "I sent her," says Cowper, describing the scene, "to a friend, to whom I related the whole affair, and despatched him to my kinsman at his coffee house. As soon as the latter arrived, I pointed to the broken garter which lay in the middle of the room; I apprised him also of the attempts I had been making. His words were, 'My dear Mr. Cowper, you terrify me! To be sure you cannot hold the office at this rate — where is the deputation?' I gave him the key of the drawer where it was deposited; and, his business requiring his immediate attendance, he took it away with him: and thus ended all my connection with the Parliament office."*

* Vide Cowper's Life and Correspondence, by Southey, vol. i. p. 130.

When death is produced by a failure of the respiratory organs, whether commencing or not with apoplectic coma, the blood is found chiefly accumulated in the right side of the heart, the difficult transmission of the blood through the lungs preventing its due arrival at the left side. This, therefore, is a distinguishing character of the appearances presented after death by Asphyxia. The two great modes of death which have been noticed, are, however, in themselves sufficiently apparent, and cannot well escape the attention of any persons of observation. In the very work from which I have recently quoted there is an interesting illustration of this. I will give it in O'Meara's own words.—Whilst conversing with Napoleon he had fallen into a fainting fit, and dropped on the floor: —

"When I recovered my senses," says he, "and opened my eyes, the first object which presented itself to my view I shall never forget; it was the countenance of Napoleon bending over my face, and regarding me with an ex-

pression of great concern and anxiety. With one hand he was opening my shirt collar, and with the other holding a bottle *de vinaigre de quatre voleurs* to my nostrils. He had taken off my cravat, and dashed the contents of a bottle of eau de Cologne over my face. 'When I saw you fall,' said he, 'I at first thought that your foot had slipped; but seeing you remain without motion, I apprehended that it was a fit of apoplexy; observing, however, that your face was the colour of death, your lips white and without motion, and no evident respiration or bloated countenance, I concluded directly that it was a fit of syncope, or that your soul had departed.'"

It is obvious, however, that death may take place in more complicated ways than those which have engaged our attention. The same causes which enfeeble the action of the heart, not unfrequently destroy also the healthy changes of the blood in the lungs. Thus the patient is often equally in danger of death from syncope and asphyxia, and he sinks partly from

the one, and partly from the other. Apoplexy is sometimes so suddenly fatal, that the sufferer seems to die chiefly from the shock which he has received; and many violent causes of death, which obstruct the respiration, such as hanging or strangling, are also prejudicial in impeding the circulation in the neck, and occasioning apoplectic congestion. When death is produced by starvation, it is attended with inflammation of the stomach and bowels, and a degree of febrile action, which more or less complicate the process. There can be little doubt, however, from the emaciation and great debility which ensue, that life is chiefly destroyed in the manner already considered as a failure of the action of the heart.

In addition to the influence of cold in producing coma, it also, no doubt, tends to depress the heart's action, and destroy the nervous energy. At the same time, the very prominent manner in which the brain is affected by reduction of temperature, renders it probable that

the condition of coma is a first great step in the arrest of the vital actions.

The modes of death, then, which we have considered, have close alliances with each other, but, for the sake of simplicity, they have been spoken of in their more elementary forms. Nor is the consideration of them in a separate manner devoid of practical advantages; for it is of the greatest importance, in many diseases, especially in fevers, to bear in mind the tendencies which present themselves to one or other mode of death; and frequently the safety of the patient is attributable to the perseverance with which such tendencies are obviated.

Sometimes coma has to be relieved—sometimes difficult respiration has to be alleviated—sometimes the sinking strength requires the timely and diligent administration of nutriment. The medical man has thus, not seldom, to become the nurse of his patient, and often the machinery of life is alone kept in motion by the opportune aid which he affords. But

how often has the more devoted attention of woman called back to life the unconscious child! how often relieved the agonies of man when the finger of death was pressing heavily on his eyelids! The chamber of sickness is thus hallowed by affection, and the torch of life rekindled by the light of love.

We may state then, broadly, that any great and perilous arrest in the circle of actions which constitutes life, is induced principally in the way of syncope or asphyxia, though it is unquestionable that death may arise in a manner which cannot be well classed under either of those heads.

In some of the putrid fevers, for example, the depravation of the blood seems so general, that death (as evidenced by the decomposition of the solids and fluids of the body) appears actually in progress before any complete failure of the respiration or circulation.

The introduction of some poisons, also, is peculiarly inimical to the *vitality* of the blood.

Thus the death of King John is beautifully

described by Shakspeare, as commencing even in the blood itself—

"It is too late; *the life of all his blood*
Is touch'd corruptibly; and his pure brain,
Which some suppose the soul's frail dwelling-house,
Doth, by the idle comments that it makes,
Foretell the ending of mortality."

ACT V.

The resuscitation of dying persons is founded on a knowledge of the subjects which have engaged our attention; for where the failure of the circulation or respiration depends on causes which are not necessarily permanent, temporary assistance may restore life. The use of stimulants and opiates, in cases of loss of blood, are the means of renewing the action of the heart when it has already nearly ceased to beat.

The transfusion of blood is also sometimes resorted to. The late Mr. Ingleby, of Birmingham, in his work on Hæmorrhage *, mentions an instance in which he employed it with advantage in the case of a woman who had just

* Ingleby on Uterine Hæmorrhage.

been confined. All the usual means had been tried, and the patient did not rally. She was "in a constant state of jactitation, with a dewy sweat and pinched features." The respiration was difficult, "with the sound of air passing through the mucus."

The patient became cold and insensible. With the assistance of two other medical gentlemen, with whom he advised, Mr. Ingleby proceeded to inject some blood into her veins which he had obtained from the arm of her husband. In less than five minutes, a perceptible improvement arose, which was confirmed in about an hour. This operation is not, however, always so fortunate, and is liable to some serious objections. We require, no doubt, more experience on the subject; but, in the mean time, it is one of considerable interest. Mr. Ingleby remarks, at the conclusion of his case, that the scriptural expression applied by Adam to Eve —"bone of my bone, and flesh of my flesh,"—seems in this case, to have been literally applicable.

It is, however, in cases where the respiration is suspended by the narcotic poisons that the most marked advantages may be seen from artificial aid. I shall relate a case with which I was much interested and surprised, and though a considerable time has now elapsed since it occurred, I feel no diminution of the astonishment I first experienced.

A young woman of the name of Caroline Mercy was brought into the Infirmary at Manchester, on the 16th of June, 1849, at half past three, P.M. She had taken opium with a view to destroy herself, and was in a complete state of insensibility. It was impossible, by pulling the hair or pinching the skin, to excite any wincing or signs of uneasiness; nor was any effect produced by the sudden affusion of cold water. The pupils were contracted in an extreme degree; and the countenance presented that peculiar vacancy, or want of expression, which is so characteristic of the influence of opium. The breathing was very considerably embarrassed, the inspirations and expi-

rations being separated by an unusually long interval, and accompanied by a slight rattle. The extremities were warm. As soon as she was put to bed, Mr. Gaskell, the resident medical officer, introduced the stomach pump, with which he injected and withdrew about a gallon of cold water; but towards the end of the operation, as the breathing became laborious, the rattle louder, and the surface assumed a more livid appearance, he thought it prudent to desist. He accordingly introduced into the stomach a solution of ammonia, afterwards removing with the pump as much as could be conveniently withdrawn. Large sinapisms were then placed down the back, but she appeared, notwithstanding, to get gradually worse; the respiration became more difficult, the lividity greater, and the pulse less full, and slightly irregular.

Boiling water was now applied to the feet and legs, which had the effect for a time of increasing both the power and frequency of the respirations; but the benefit was only of a very

transitory kind. At about a quarter past five, Mr. Gaskell thought it desirable to assist the respiration by artificial means, and he accordingly proceeded to adopt the following expedient. He placed a large pitch plaster on the abdomen, and, by this means maintaining his hold, endeavoured to solicit the usual respiratory movements. This did not, however, give him so much assistance as he had expected, and he was, therefore, induced to abandon it after a short trial. He then placed a similar plaster on each side of the chest, by which he was able to command a more decisive effect: he thus, with the assistance of the man nurse, alternately raised and depressed the ribs in imitation of the breathing. This plan was productive of some amendment; the lividity diminished, and the natural muscular efforts were more frequent and apparent; the assistance was adapted as carefully as possible to the indications of nature.

In addition to these means, boiling water was occasionally applied to the arms and legs.

At about five o'clock I came to Mr. Gaskell's assistance. At this period the temperature of the body had become considerably reduced; and I remember the patient's appearance was exactly that of a dying woman; and I believe it was the impression both of Mr. Gaskell and myself that our patient could not survive long. The lips were of a livid colour, the expression of the countenance altogether cadaverous, and the rattle in the throat had become exceedingly loud. Boiling water poured on the legs did not now excite the slightest movement, so that we were almost disposed to regard the case as hopeless. The circumstance, however, that whilst the exertions lasted, they had evidently been productive of advantage, did not suffer us to abandon further trial. We now laid aside the plasters, and taking hold of the margins of the ribs, endeavoured to support the respiration with our hands alone. Standing on each side of the bed, with our faces towards the feet of the patient, and our fingers curved round the cartilages of the ribs, we could easily enlarge

the capacity of the chest, by approximating the ribs at the same time that they were elevated; while, in expiration, the reverse movement could as easily be accomplished. By a steady continuance of these efforts, we had the pleasure of seeing a gradual improvement in our patient; and towards six o'clock, the pulse had acquired the hard jerk which is commonly felt when the system is under the influence of opium. Shortly after six, indications of returning sensation were evinced by occasional spasmodic quiverings of the muscles of the chest and abdomen. These spasmodic movements resembled the actions which usually denote approaching dissolution, with this essential difference, however, that they became more frequent and prolonged at each time that they were renewed. A little before seven o'clock she raised her eyelids, and at the same time her left arm was slightly elevated. By persisting in artificial respiration, and using means to rouse sensibility, such as forcibly striking the face and chest with a wet towel, and applying ammonia

to the nostrils, in about half an hour from this period the state of stupor had in a great measure disappeared. Instead of lying prostrate on the back, she now lay on her side, and was enabled to breathe without assistance. We then caused her clothes to be put on, and the vesicated parts being dressed, she was taken out of bed, and compelled to walk about the room.

It is worthy of remark, that whenever from fatigue we had been led to suspend our efforts to maintain the respiration, a degree of relapse followed; the lips became more intensely livid, the pulsations of the heart more feeble and irregular, and the respirations fewer, and accompanied with a louder rattle. On again resuming operations, the converse was also noticed. When the amendment became decided, and the sensibility returned, the rattle disappeared altogether; and this took place without any expectoration, notwithstanding it was natural to suppose that a considerable quantity of mucus was contained in the air

passages. The woman was fortunately a favourable subject for our manipulations, as the abdominal parietes were sufficiently lax to admit the easy prehension of the chest. As far as it could be done, we always waited for the natural indications of the act of respiration, and paid great attention to regulate our movements in correspondence with each other. At the conclusion, the cartilages of the ribs were slightly everted, and the cuticle removed in places by the unavoidable chafing of the hands.

June 17. — It was found that she had been kept out of bed all night, which scarcely appeared necessary, and was, indeed, contrary to instructions. She had vomited through the night, and complained of shooting pains in the head. The pupils were less contracted; the pulse was not ascertained, owing to the vesicated condition of the arms.

For several nights after this period she was troubled with a starting in her sleep, which, however, was gradually removed by the administration of twenty drops of laudanum every night at bed time. She also suffered a good

deal from the condition of her legs, which were severely scalded, especially on the posterior part, where they had been in contact with the hot water which had fallen on the bed. On the 27th of August she left the hospital, cured.

After this account, which I have purposely given at length, as it illustrates the subject in a remarkable manner, it is natural to wish to know the previous circumstances of her case. The woman's husband, who was a master plumber, failed about four years before her admission. Since that time he had lived irregularly, a circumstance which caused her to be much distressed and dejected in spirits.

Two years after this failure she left her husband to reside with her mother, but was persuaded again to live with her husband, who had promised an amendment, which, it seems, he did not keep; she again became low spirited, pawned her clothes, and was ashamed to return to her mother.

On Sunday, the 16th of June, she sat down

to dinner at one o'clock, when, after a quarrel, she left the house, and purchased sixpenny-worth of laudanum at four different shops: she said she obtained about a dessert spoonful for a penny, and drank it as she purchased it. She then went to a neighbour's house, and can only recollect feeling heavy, and that she had brandy given her.*

When death is anticipated, there is a common curiosity to know the period at which it will take place. But from what has been just said, it will be evident that it is not always possible to predict the precise time, nor are the symptoms which indicate its approach always to be relied on. When the evidences of dissolution, however, begin to manifest themselves, a general failure of the temperature, with a cold dew on the skin, may generally be considered as indicative that the scene is about to close. In many cases it is easy to recognise the fatal turn which diseases take by the alterations

* See Lancet, for Oct. 1840. Case of recovery from the effects of opium, by J. Bower Harrison.

which the symptoms undergo. Where internal inflammations are about to issue in death, there is mostly a striking change in the expression of the face, and sometimes a curious shrinking of the body.

I shall never forget one instance in which these signs were particularly manifest. A young woman, who had formerly been a servant in Manchester, became ill, was unable to continue in service, and was eventually removed to the Infirmary. One day, as I went to visit her as usual, I observed a complete alteration in her countenance. It seemed *shrunk and diminutive*, with a ghastly paleness. She put out her hand and said, "You seem as if you did not know me."—She spoke in a changed voice.

She complained of no pain, but I remarked a trembling in her hands, like that of the shaking palsy. The mind was perfectly collected, but her usual features seemed only mimicked by their pale shrunk copy. She said she knew that she was going to die,—and so it proved.

The nose and lips are very characteristic in

the dying. The lips become pale, the nostrils dilated and dark looking, and the hairs about the lips seem more than usually apparent; the teeth look like pieces of ordinary bone, and the eyes seem to shadow through the eyelids, or are partially turned under the lids; the nails look dark, and the ends of the fingers sodden.

Finally, convulsive twitchings often show themselves in the face, with singular elevations of the eyebrows, and staring of the eyes. A gaping attempt to breathe terminates the struggle.

When coma is present, a mucous rattle is generally of fatal import; and, *è contrario*, when the lungs are affected, the supervention of coma is equally to be dreaded.

When fluids taken by the patient flow back from his mouth, or fall heavily down his throat as if poured into an ordinary tube, death is soon to be expected.

In young children, a curious playing with the bed-clothes often attends fatal affections of the brain. I remember a little child, who had her handkerchief in her hand, which she spread out

repeatedly with apparent care, and in a fantastic manner, that would have been amusing but for its fatal import. The picking of bed-clothes and catching of the hands, as if at imaginary objects, are well known as terrible indications.

Chomel remarks, as of serious presage, the automatic manner in which a patient will unceasingly draw his hand to his side, in spite of the efforts of the physician to ascertain his pulse. I might enlarge much on such points, but it would, perhaps, be "to consider too curiously to consider so."

The signs of death are not, however, always very marked; for when death arises in advanced and feeble age, the vital powers are so easily depressed, and the heart's action brought to a stand in so imperceptible a manner, that it is common to speak of it as a quiet sleep. Madame D'Arblay, writing to her husband, graphically describes the death of her revered father, Dr. Burney, the celebrated author of the History of Music.

"An awful stillness pervaded his apartment;

and so soft became his breathing, that I dropped my head by the side of his pillow, to be sure that he breathed at all. There, anxiously, I remained, and such was my position, when his faithful man-servant, George, after watchfully looking at him from the foot of his bed, suddenly burst out into an audible sob, crying out, 'My master! My dear master!'

"For a moment, however, only; an alarm from his outcry had been raised, and the servants, full of sorrow, hurried into the chamber, which none of the family, that could assemble, ever quitted, and a general lamentation broke forth.

"Yet could I not believe that all had ceased thus suddenly, without a movement, without even a sigh! and, conjuring that no one would speak or interfere, I solemnly and steadily persisted in passing a full hour or more in listening to catch again a breath I could so reluctantly lose; but all of life, of earthly life, was gone for ever; and here, *mon ami*, I drop the curtain."

* Memoirs of Dr. Burney, p. 432.

So frequently as medical men are called upon to contemplate the last hours of human existence, it is to be regretted that they have not more often given to their fellow men the reflections into which they must naturally have been led. It cannot but be, that many accomplished minds are to be found in a profession which is so enlightened; and it is not then easy to assign any sufficient reason for this silence. Possibly a kind of false delicacy may have operated on some minds, and others may have been diverted from such thoughts by the pressure of active occupation. It is common to suppose that medical men are blunted in their feelings by the nature of their avocations. It may be that there is some foundation for such an opinion; but I think the apparent want of sympathy sometimes found, is more frequently the effect of a strong temporary direction of the mind to the contemplation of curative means. Yet it must be owned that habit does much to lessen that exquisite sensibility with which we instinctively regard the

chamber of death. The anatomist, as he traces with curious scalpel the secret structure of the frame, loses in professional technicalities the awful truth that he contemplates his own likeness. The hoary-headed gravedigger, as he turns up the mould to receive his fellow man, thinks not how soon the sand will rattle on his own coffin, and his humble name "shine upon the plate." This indifference is, to some extent, good and necessary; but it is sadly too common and too great. But yet to the medical man, above all others, there is something of terrible reality in death. The student pictures death in his own manner: he looks upon it as the distant prospect which is to surround him at the remotest period of his life, the haven and resting place of his toil, the slumber and quiet repose which is to terminate the harvest of his day. The father tells his children of a peaceful and a better country, and smooths the pillow of his sick child as he whispers words of consolation and affection. The medical man has fresh in his mind, with all its

ghastly reality, the cold image of his once dear friend; he yet hears the choking rattle in his throat, and yet wipes in imagination the perspiration from his corpse-like brow.

To what result then shall we come after the contemplation of death?—to the greatest and the best: the daylight of life is still around us, but the gloom of that night, in which no man can work, will soon be foreshadowed by sickness, infirmity, and age. Before this night steals upon us, and our ability for useful exertion ceases in the thickening obscurity, let us remember the reality of these things,—and, as we write our characters in the indelible language of deeds that can never be changed, let us remember, also, how soon the story will be told, and the book closed for ever.

It is, indeed, a mortifying thing to think what a laborious preparation we make for a few years of existence. It is humiliating to look back to the cares of infancy—the nights of maternal watching and anxiety—the hopes of childhood

—the dreary toils and frequent tasks of school life—the ambition of riper years, with its unceasing efforts to attain what we find at last to be vanity and vexation. For what do we prepare,—if gold and silver at last tire the eye—if the applause of the world is found empty and interested—if ambition estranges friendship—if wealth cools our best affections, and separates man from his fellow man? For what do we prepare whilst the grave is so near to all of us, and the feet of those who are to carry us out are already lingering at the threshold of our doors?

But who is there that timely thinks on these things? Who can imagine his own death—anticipate the time when he shall be the object of fearful regard in others—when he himself shall be the almost unconscious being struggling with the thickening breath, and gasping with the convulsive throes of death? Who can think of the world being without himself; of the things which he has called his own being entirely at the disposal of others? To

realise such ideas is to catch a glimpse of the true value of present interests. What then think we of the approbation of the great—the vanity of fashion, the pride of learning and the dignity of title;—the remembrance of one kind feeling, one charitable action, one generous sentiment and loving emotion, is more grateful to the heart, and more satisfying to the understanding. We are all too ready to avoid the contemplation of death. The subject is not an agreeable one, and can seldom find a fitting place in our consideration. It is too soon, and we would put it off "till a more convenient season." But if we may not consider our own end, have we no one dear and precious to us in whose life our interests are intimately and affectionately entwined!— How shall we stand on the grave-side of such precious one, and with what thoughts shall we hereafter turn from the little circle of our mourning friends to the fresh landscape which surrounds the tomb?

THE

HUMAN MIND

CONSIDERED IN SOME OF ITS MEDICAL ASPECTS.

Macbeth. How does your patient, doctor ?
Doctor. Not so sick, my lord,
As she is troubled with thickcoming fancies,
That keep her from her rest.

SHAKSPEARE.

THE

HUMAN MIND,

&c.*

THERE is nothing which is more common than to hear people speak of possessing a knowledge of human nature. It is usual to signify by this a mere acquaintance with the vices of mankind, which does, indeed, form one part of such knowledge, but it is not all. What is called a knowledge of human nature is said to be acquired only by mixing with the world, which implies that a real intimacy with the workings, tendencies, and capabilities of the

* Read at a *Conversazione* of the Manchester Royal Institution, and published in No. 10. of the Psychological Journal, edited by Dr. Forbes Winslow.

human mind is industriously kept back in our literature, and that by the general consent of mankind it is deemed better that a great part of the world should be ignorant of the true position of their fellow beings. Many of those who are teachers of religion and morality, have certainly derived their ideas on this subject from sources which show, in point of fact, a complete ignorance of human nature, or, at least, the studious *disguisement* of such knowledge.

The reserve, which is common and proper in society, may screen from the unreflecting, and those little conversant with life, much of the real nature of the human mind.

The prescribed forms of living, of speaking and writing, and the conventional usages of mankind, have given an artificial hue to our actions and language, and thus the words of the great dramatist have become literally true, that "all the world is a stage, and all the men and women merely players." The true character of the human mind in its more intimate

workings, is little confessed in our literature, and little acknowledged in our laws. Unfortunately, the real appreciation of the human mind (with regard to its actual state, and not its abstract consideration) has scarcely appeared to fall within the province either of the moralist or metaphysician, and has remained a kind of neutral ground, uncultivated because unclaimed. That knowledge which is sometimes designated a *knowledge of the world,* approaches, perhaps, nearest to the subject in question, but is seldom possessed by those who are either desirous or capable of systematizing their information, and thus, much of what is really known of our common nature is lost both to the philosopher and the philanthropist. In the writings of some of our novelists, it is true, we find a considerable amount of this species of information, but it is for the most part rendered subservient only to the entertainment of the reader, and not in every case calculated for his edification. The

writings of Fielding, Smollett, Cervantes, and Le Sage, with many others of more modern date, amongst which I may mention those of Mr. Charles Dickens, abound in judicious reflections on men and manners, and discover no little penetration into character and mind. After all, however, there is an evident deficiency in published or recognised information of this kind; and hence the surprise or affected surprise with which it is common to view what are called the *inconsistencies* of human nature. That certain infirmities of mind are not incompatible with genius, it may be common to admit; but when we approach the subject closer, we shall find the poetic temperament, more frequently than not, clouded with insanity or touched with perversity. The same bright spirit which rejoices in the sunshine of nature is not less sensitive of the gloom. There is often a foreboding of evil, and often the imagination will heighten the calamities which are really present, until a

thousand heart-rending associations grow up in the fertility of the mind.

The consideration of the human mind, then, in what may be called its medical aspects, seems to me one which has not yet sufficiently engaged the general attention of mankind; and I wish on the present occasion to bring it before your notice, as a subject which is neither devoid of interest, nor wanting in utility.

The effect of temperament may first claim our attention. I shall not, however, confine myself to the divisions which strictly medical writers have formed on this subject, reserving to myself the freedom of the popular acceptation of the word.

The constitution of the body as to its bulk and general aspect, as well seen in the countenance as in the conformation of other parts, is known to be connected with accompanying peculiarities of mind which are of every day observation. There is an asperity in the countenance and figure of some people which imme-

diately strikes us, and we feel a sort of intuitive dislike. There are others whose open countenance and portly bearing tell at once of generous feelings and easy dispositions. Every one remembers the passage in the play of Julius Cæsar: —

> "Would he were fatter; but I fear him not,—
> Yet if my name were *liable* to fear,
> I do not know the man I should avoid
> So soon as that *spare* Cassius."

The Sanguine Temperament, as the very name implies, is characterised by a constitution in which the blood-vessels are predominant; the face is red, and easily flushed, the complexion often light; the temper hasty, the actions quick. Those who have this temperament in a marked form, often act by impulse; they are restless, and have difficulty in waiting for the result of their undertakings. The mind is often too easily excited to allow of a proper operation of its workings; the ideas flow too quickly, and in a little while become confused. Such persons, when called upon in exciting cir-

cumstances, become embarrassed,—are what they call nervous, and lose self-possession—or act to disadvantage.

The character of Peter in the sacred writings gives us a good example of this sanguine temper: we find him saying to his Lord, "Though all men shall be offended because of thee, yet I will never be offended; I will lay down my life for thy sake:" and again; "though I die with thee, yet will I not deny thee." But, as in many other sanguine people, the feeling wanted the support of a steady equanimity. When Jesus was betrayed, and Peter found himself accused of being in his company, he denied any knowledge of him; and when he found that he was known by his accent, ("surely thou also art one of them, for thy speech betrayeth thee,") "he began to curse and to swear, saying, I know not the man." Such is often the fate of the warm protestations of sanguine people. The emotion which attends the expression of their sentiments gives the complexion to them whilst it exists, but it is

not enduring, and is succeeded by other emotions, which, for the time, overcome the better feelings of the heart. This sanguine temperament gives what we call the generous character; the warmth of temper which, in moderation, we rather admire as heightening the affections, and giving joy and gladness: but it has also its sorrows and its errors. — There is the quick resentment and the passionate grief, and these are the dark aspects which are full of tears and lamentation. Hamlet, you know, says to Horatio: —

> "Give me the man that is not passion's slave,
> And I will wear him in my heart's core;
> Aye, in my heart of hearts, as I do thee."

In sanguine people, the train of thoughts appears to be much quicker than in others. This is attended with certain advantages, but corresponding disadvantages. Such minds are imaginative — what is called ingenious. The associations are not too strong to forbid erratic thoughts; relations are often readily perceived, but there is less exactness. The memory is,

perhaps, less retentive, and the speed of the thoughts leads often to confusion. They crowd on one another until indistinctness arises. This indistinctness is sometimes painful.

This kind of mind is what is called passionate; hence the term *hasty*, which may be well used as indicative of a too rapid procession of thoughts. The mind cannot well operate in this hurried state. The ideas flash across, but they light up too fiercely a train of associations to admit the suggestions of other minds.

The brain is, perhaps, over sensitive, and its powers too readily exhausted, and too intense whilst in operation.

The Lymphatic Temperament is quite the reverse of the sanguine. Those who have this temperament are not easily moved, or excited; the skin is pale. Such persons are better calculated to undergo anxieties, or meet the exigencies of sudden emergencies. The mind has not those quick sympathies, or brilliant imaginings, which distinguish a warmer temperament.

There is a steady, cool calculation, which is more adapted to worldly prosperity; feelings less readily wounded, and less apt to betray themselves in the excitement of life. Some possess this in a surprising degree, and many assume it. Many cover a natural sensibility by the forms and usages which polite life has invented, and studiously avoid showing the natural burst of affection, or the bitter outpourings of grief.

It is well, in some degree, that this should be done; but let not nature be altogether destroyed, and all the fine sensibilities crushed, under an artful and sophisticated mannerism.

There is a story told of a cockney, who visited the beautiful and romantic scenery of the Alps, and being asked his impression of a sublime prospect, which suddenly burst on his view, said, that he must confess "*it was a well got up thing.*" This is the school of fashion, which gives us two fingers to touch as a welcome, after the absence of as many years.

In some, the operations of the mind are so

slow that they seem to stagnate, and pass into reverie. The extreme of this condition lapses into a state of imbecility and fatuity; but a certain degree of apathy has its advantages. The mind has time to act; there is no over-crowding of ideas—no hurry of thought. There is more continuance of application—less impatience of consideration. The *affections* do not trouble the operations of the mind. There are not those quick sympathies which have relations with every thing that passes.

There are some people, again, in whose constitution the nervous system seems to have an unnatural preponderance; the mind seems to be constantly in a restless state, and to wear out the body in a ceaseless activity, or in the struggles of overweening ambition. Such characters are ever pressing on in the competition of social life; often a prey to cares and anxieties, which follow each other in a never-ending succession. "*After life's fitful fever,*" they indeed "*sleep well.*"

Hypochondriacal feelings are, no doubt, in a

great measure, connected with constitution or temperament. Melancholy is much more common than is generally conceived, and may be, as I have already hinted, perhaps in some degree inseparable from a mind which highly appreciates the beautiful, has quick sympathies with all around, and a thoughtful regard to the possibilities, and even probabilities of a changing world. On this account it has always been considered by the poets as a poetic feeling, and though this view may have attracted the sneers of some, or the ridicule of others, there is a certain truth in the opinion. Ben Jonson alludes to this notion, with respect to melancholy, as an accompaniment of sensibility, in his "*Every Man in his Humour.*"

"*Stephen.* Ay, truly, sir, I am mightily given to melancholy.

"*Matthew.* Oh! it's your only fine humour, sir; your true melancholy breeds your perfect fine wit, sir. I am melancholy myself divers times, sir; and then do I no more but take pen and paper presently, and overflow your half a score or a dozen of sonnets at a sitting."—Act III., Scene 1.

Again: —

"*Ed. Knowall.* . . . . What think you of this, coz?

"*Stephen.* Why, I do think of it; and I will be more proud and melancholy and gentlemanlike than I have been, I'll insure you."—Act I., Scene 2.

In Scott's "Diary" (May, 1827,) he says: — "Imagination renders us the victim of occasional low spirits. All belonging to this gifted, as it is called, but often unhappy class, must have felt, but for the dictates of religion, or the natural recoil of the mind from the idea of dissolution, there have been times when they would have been willing to throw away life, as a child does a broken toy. I am sure I know one who has often felt so."

A disposition to melancholy is by no means, as might at first be imagined, necessarily indicated by a grave and staid deportment.

In a large proportion of instances, it is even coupled with an exuberance of spirits, which would seem to promise a perpetual sunshine of cheerfulness.

The mind, however, which is alive to joy, is

also, and perhaps equally, alive to sorrow; and often passes by quick transitions from the one to the other.

Our great dramatist, in mingling the ludicrous with the tragic, has evidently shown his acquaintance with this tendency of the human mind. Byron has happily blended in some of his most successful passages the sublime and the ridiculous, thereby greatly heightening the effect of both. In his "*Corsair,*" however, he has directly touched upon this peculiarity of the mind, where he says—

> "Strange though it seem, yet with extremest grief
> Is linked a mirth,—it doth not bring relief.
> That playfulness of sorrow ne'er beguiles,
> And smiles in bitterness,—but still it smiles."

In Dr. Currie's Life of Burns, allusion is made to the combination of melancholy and gaiety in the character of that extraordinary poet.

Notwithstanding the gaiety of Burns' writings, he was constitutionally a melancholy man, and was subject "to those depressions of mind, which are perhaps not wholly separable from

the sensibility of genius, but which, in him, arose to an uncommon degree." . . . . . "Such a disposition is far from being at variance with social enjoyments. Those who have studied the affinities of mind, know that a melancholy of this description after a while seeks relief in the endearments of society, and that it has no distant connexion with the flow of cheerfulness, or even the extravagance of mirth."*

In a letter from Sir Walter Scott to his daughter in-law, the following mention is made of Matthews, the comedian. "I am glad you like my old acquaintance, Matthews. Some day I will make him show his talent for your amusement in private—for I know him well. It is very odd—he is often subject to fits of deep melancholy."†

From these cursory remarks on melancholy, I may proceed to speak of some particular states of mind, which attend the same peculiarity of temperament, and though not incom-

* P. 105. † Vol. iv. p. 10., Lockhart's Life.

patible with mental sanity, are yet to be considered as bordering upon derangement.

Some of the illustrations I shall bring forward are from works of poetry, but may be considered, nevertheless, as expressive of actual facts, because I have scrupulously avoided making use of them where the subject had need of graver support; so that in effect they are rather introduced to relieve and exemplify the matter, than to substantiate it. The curious feelings to which I allude, exist in various degrees of intensity in different people. They cannot be considered as common to everybody, and are far more frequent or powerful in the imaginative and eccentric, than in others. Yet I should conceive that they prevail to a greater extent than is commonly supposed.

Amongst this class of feelings may be placed the disposition which is sometimes manifested by those who stand on precipitous cliffs to cast themselves down. This seems suggested by a kind of insane impulse, which is dreaded by the very person who indulges it.

Scott beautifully alludes to such a feeling in "The Lady of the Lake."

"There are, who have at midnight hour,
In slumber scaled a dizzy tower,
And on the verge that beetled o'er
The ocean tides incessant roar,
Dreamed calmly out their dangerous dream,
Till wakened by the morning beam;
When dazzled by the eastern glow,
Such startler cast his glance below,
And saw unmeasured depths around,
And heard unintermitted sound,
And thought the battled fence so frail,
It waved like cobweb in the gale;
Amid his senses giddy wheel
Did he not desperate impulse feel
Headlong to plunge himself below,
And meet the worst his fears foreshow?"

Canto II. 22.

The same is alluded to by Shakspeare in his "Hamlet," when he is cautioned by Horatio not to follow the Ghost,—

"What if it tempt you towards the flood, my lord,
Or to the dreadful summit of the cliff
That beetles o'er his base into the sea;
And there assume some other horrible form,
Which might deprive your sovereignty of reason,

> And *draw you into madness?* Think of it,—
> The *very place* puts toys of desperation,
> *Without more motive*, into every brain,
> That looks so many fathoms to the sea,
> And hears it roar beneath."

This, though fiction, is true to nature. We know how many have jumped from monuments, and given way to an impulse to suicide created by circumstances. Many instances of the same kind might be brought together, not merely from our classical writers, but from the pages of our journals and newspapers. The cases of suicide which seem to have been suggested by the contemplation of frightful precipices, deadly poisons, or dangerous weapons, may be considered under this head. Hence the importance of avoiding evil thoughts, and tampering with dangerous ideas. The same kind of feeling sometimes urges people to contemplate scenes of suffering and distress, which are painful to be witnessed, or pushes them on to acts which they at the same time dread. This tendency is also well alluded to by the great poet of nature in the scene in

"Romeo and Juliet," where the latter contemplates her anticipated position in the tomb of all the Capulets:—

"How if, when I'm laid into the tomb,
I wake before the time that Romeo
Comes to redeem me?
* * * * *
Alack! alack! shall I not be distraught,
Environed with all these hideous fears?
And madly play with my forefathers' joints,
And pluck the mangled Tybalt from his shroud?
And in this rage with some great kinsman's bone,
As with a club, dash out my desperate brains?"

This insane feeling is here well portrayed, where the very speaker has been previously expressing her horror of that dreadful place, where—

"Bloody Tybalt, yet but green in earth,
Lies festering in his shroud."

There are feelings sometimes which are contradictory in their nature and objects. The mind is strangely perplexed in a war of emotions—emotions which are cherished whilst they are painful. Actions are not always dictated

by the simple feelings which seem to have given them birth. How many persecuting spirits have wept for those they have persecuted! There are those whose feelings of mercy and forgiveness have struggled hard and yet yielded to pride and an ignoble revenge. Such contradictory feelings do indeed partake of an insane character, and there is a fine significance in the words of the poet,—

> "That to be wroth with those we love,
> Doth work like madness in the brain."

I bring forward these remarks on such states of mind, because I think it of great importance (as they really do exist) that they should be at once deprecated as unhealthy and insane feelings; and in order if possible to make it appear that the proper control of the mind, which constitutes virtue, is in reality the most conducive to a sound understanding. Let it not be considered, however, that I mean to assert that mental derangement is necessarily the result of vice—it is more often the cause of it.

To resume, however. In the autobiography of the celebrated Goethe, he makes reference to this most unfortunate contention of feeling.

Goëthe says,— "I accordingly fell into that evil disposition of mind which often misleads us so far as to make us find a pleasure in tormenting those whom we love; and I abused the fondness of a young female by tyrannical and arbitrary caprices. Secure of the affection of Annette, and of her anxiety to please me, I vented on her all the ill-humour that the failure of my poetical essays, the apparent impossibility of doing myself honour by them, and everything else that occurred to vex me. I poisoned our best days by groundless and unworthy jealousies. She long endured all these follies with angelic patience; but I had the cruelty to tire it out."*

Hazlitt observes, that men often "take a perverse delight in acting, not only contrary to reason, but in opposition to their own inclinations."†

* P. 218. vol. i. † Characteristics, p. 82.

Again and again I may say that the contemplation of these curious workings of the mind should lead us to see the importance of attending to its due regulation, and make us regard improper feelings as insane impulses which are to be dreaded as disease.

The peculiar notions which some eminent men entertain, probably against their better judgments, may be also just alluded to. Scott speaks of a feeling of *pre-existence* in his Diary (Feb. 17.):—

"A hard day of working, being I think eight pages before dinner. I cannot, I am sure, tell if it is worth marking down, that yesterday, at dinner time, I was strongly haunted by what I would call the sense of pre-existence—viz. a confused idea that nothing that passed was said for the first time; that the same topics had been discussed, and that the same persons had stated the same opinions on them. . . . . There was a vile sense of want of reality in all I said and did. . . . . Something of this

insane feeling remains to-day, but a trifle only."*

This feeling of pre-existence is a sort of poetical feeling; — I mean that it is most frequently met with in persons of highly imaginative minds, or in those engaged in metaphysical pursuits. Dickens mentions, in his "Pictures from Italy," his first sight of Ferrara in the following terms: —

"On the foreground was a group of silent peasant girls leaning over the parapet of a little bridge, looking now up at the sky, now down into the water; in the distance a deep bell; the shadow of approaching night on everything. If I had been murdered there on some former life I could not have seemed to remember the place more thoroughly, or with more emphatic chilling of the blood; and the real remembrance of it acquired in that minute is so strengthened by the imaginary recollection, that I hardly think I could forget it."†

* P. 114. vol. vii. † P. 102.

Shelley states, "that whilst walking with a friend in the neighbourhood of Oxford, a scene presented itself which he remembered long ago to have seen *in a dream.*" * Mrs. Shelley remarks on this, "I remember well his coming to me pale and agitated to seek refuge in conversation from the fearful emotions it excited."

Many of us may have a sort of feeling of reminiscence of things which we in reality see for the first time, probably because they awaken a train of thought similar to what other objects may have previously excited.

From these desultory remarks on the characters of mind which accompany the more highly, and may be unduly, developed powers of the imagination, I may proceed to speak of the connexion of bodily disease with mental peculiarity

Every one knows the effect of disease on the human mind in rendering it a prey

* Shelley's Memoirs, p. 135.

to uneasy feelings and capricious changes. Happy, indeed, is he who has no reminiscences of weary hours spent in midnight vigils, or long days of unrest, in which the mind refused to take its wonted pleasure in occupation or literature. We are, perhaps, too apt to regard our minds as above the influence of circumstances, and altogether dependent on self-control and voluntary effort. Disease may teach us that the mind itself is the gift of a superior power, and its very complexion dependent on causes which we cannot command.

Shakspeare, as you all well know, makes a happy allusion to the effect of disease in enervating the mind, in Cassius's speech in contempt of Cæsar:—

"He had a fever when he was in Spain,
And when the fit was on him, I did mark
How he did shake. 'Tis true, this god did shake;
His coward lips did from their colour fly;
And that same eye, whose bend doth awe the world,
Did lose his lustre! I did hear him groan;
Ay! and that tongue of his, that bade the Romans

Mark him, and write his speeches in their books,
Alas! it cried, Give me some drink, Titinius,
As a sick girl."

Apoplexy and palsy bring the finest minds to imbecility. The sufferer yields to fits of passion, and readily "dissolves in tears," in alternate succession, and thus remains an object for pity and the tolerance of friendship, until another attack completes the ruin, and leaves him a miserable wreck—the shadow of his former self. "By this distemper," Sir Henry Halford tells us, "the talents of the great Marlborough were confounded." The most serene and powerful minds are troubled by disorders of this nature,—curious aversions, fits of irritation, and whining imbecility, take the place of easy and kindly dispositions; so that our very virtues are dependent on the sufferance of a superior power.

The languor and lassitude which accompany biliary derangements are well known and of common remark. The peculiar perverse states of mind which attend various forms of hysteria,

furnish us with some of the most curious instances of human weakness which can possibly engage the attention. The effects of indigestion in creating frightful dreams, have been experienced by us all. How rejoiced we are, after suffering from the most terrible nocturnal alarm, to awake, and "find it all a dream." Perchance a bull pursues us, and our limbs refuse to move,—a wild and disgusting animal fastens its teeth on us, and escape is in vain,—an immense load bears on us, and instant suffocation is impending.

Sterne, in his "Sentimental Journey," illustrates the effects of disease on the mind in his usual striking manner:—

"The learned Smelfungus travelled from Boulogne to Paris, and from Paris to Rome, and so on. But he set out with the spleen and jaundice, and every object he passed by was discoloured or distorted. He wrote an account of them, but 'twas nothing but the account of his miserable feelings. I met Smelfungus in the grand portico of the Pan-

theon,—'"Tis nothing but a huge cockpit,' said he. . . . I popped upon Smelfungus again at Turin in his return home, and a sad tale of sorrowful adventures had he to tell. . . . He had been flayed alive, and bedevilled, and used worse than St. Bartholomew, at every stage he had come to. 'I'll tell it,' cried Smelfungus, 'to the world.'—'You had better tell it,' said I, 'to your physician.'"

It is well known that age induces great mental changes. We are all willing to suppose that we grow wiser as we grow older, and it is to be hoped that this is really the case; but so far as our morality is concerned, we should bear in mind that we forsake many of our vices only because the temptation no longer exists. We "*put away childish things*" when we cease to have the desires of childhood; and the vices of youth would often come back in advanced life if we could bring back the fresh feelings of youth, and all the impulses which first took possession of our souls. How

much such considerations should make us humble, charitable, and forgiving; should render us distrustful of our own virtue, and compassionate for the failings of others.

Delicate states of health often induce, or are connected with, states of mind which seem too refined for the common intercourse of life. There is often a precocity of mind in delicate children which far surpasses in nicety of feeling the ideas of those more advanced in age. They who have remembrance of their early sick beds can tell how little their own ideal creations were understood, and how little known were the deep recesses of their infant minds. The practical in after life takes the place of the poetical, and the fine sensibility shrinks and withers in the rude competition of actual life, and in reality "concealment, like a worm i' th' bud, feeds on the damask cheek."

Debility of body is often, in fact, generally, productive of great mental susceptibility, and sometimes irritability of mind. Shakspeare says,

"Conceit in weakest bodies strongest works." People who have robust health, and have always enjoyed such, can enter little into the sentiments of others, nor appreciate the feelings which accompany feeble and imperfect states of health, or constitutions of greater delicacy and refinement. Shelley says, "I know not the internal constitution of other men. I see that in some external attributes they resemble me; but when, misled by that appearance, I have thought to appeal to something in common, and unburden my inmost soul, I have found my language misunderstood, like one in a desert and savage land."*

In considering the human mind, in its medical aspects, it might naturally enough be supposed, that the subject of insanity would form a principal part. I shall not, however, for many reasons, enter upon it in this place, further than to touch upon those lighter, or more partial derangements, which are less commonly made matter of observation or remark.

* Memoirs, p. 189.

It has often appeared to me, that much good might arise from the consideration of mental sanity, on a finer scale than has hitherto been afforded. The condition of the mind may not be properly healthy, without being betrayed into those complete aberrations which shock the observer, or call for the interference of friendly restraint. The subjcet has its relations, both to morals and jurisprudence; but there is, perhaps, no education which so fits the mind to enter on its consideration, as that which is prescribed by the study of medicine.

When we contemplate our species in the workings of great and good minds, we cannot fail to feel proud of a humanity which is capable of achieving vast designs, and compassing mighty undertakings. The names of Newton and Locke inspire us with a kind of reverence for the capabilities of our nature. We then, indeed, perceive, that there is "a divinity which stirs within us, and indicates eternity to man." How high and godlike is the mind which can scan its own operations, sit

in judgment on itself, review the events of past ages, and anticipate the future progress of societies and nations. It would be a pleasing task to dwell on the greatness of the human mind. We see it in the honest and sturdy Franklin — the humble and philosophic Dalton — the persevering and indefatigable Priestley — the bold and imaginative Davy — the philanthropic Howard — the laborious and highly-gifted Hunter. If we turn from this picture of the more lofty style of man, and look to those aberrations of the intellect which we find in the receptacles for the insane, we must feel a humiliation at least equal to our previous gratification. Here we have the drivelling idiot — the raving madman — the moping melancholic — the incoherent dreamer — and the timid and suspicious hypochondriac. Nor is it a correct opinion, that the division between the intellectual and insane portion of mankind is so broad as it appears on a cursory consideration. That there are minor aberrations of mind which do not come within the limits of actual madness, there

can be no doubt; nor is real insanity so far dissevered from the more healthy operations of the mind, as to be altogether incompatible with intermissions of extraordinary brightness.

It is well known that many of our eminent writers, especially those of an imaginative kind, were hypochondriacs. The unfortunate Cowper and Collins were of this class; and Chatterton and Haydon, it will be remembered, destroyed themselves under its influence. The Rev. Robert Hall had periods of actual insanity, and the elegant Charles Lamb probably escaped from his sister's fate only by the necessities of his own position. Whitbread, Romilly, Londonderry, and Calcraft, put an end to their own existences; but the list is too great to particularise, and it is enough to know, that learning and genius are not removed from the worst of human calamities.

The fate of the unfortunate Swift is too well known to need comment; but even before the period at which his mind gave way, it is too probable that he inwardly laboured under a

mental infirmity which, in itself, might be nearly allied to his genius.

The last document which we possess of Swift, as a rational and reflecting being, is given by Sir W. Scott, in his life of the Dean; and, as Sir Walter says, awfully foretells the catastrophe which shortly afterwards took place.

"I have been very miserable all night, and to-day extremely deaf, and full of pain. I am so stupid and confounded, that I cannot express the mortification I am under, both in body and in mind. All I say is, that I am not in torture; but I daily and hourly expect it. Pray let me know how your health is, and your family. I hardly understand one word I write. I am sure my days will be very few—few and miserable they must be.

"I am, for those few days, yours entirely,

"J. SWIFT.

"If I do not blunder, it is Saturday."

From these glimpses of the misfortunes and imperfections of great men we may see that genius is not unalloyed. Carlyle, in his esti-

mate of Scott, has much sense in the following remark: — "The truth is, our best definition of Scott were perhaps even this, that he was, if no great man, then something much pleasanter to be, a robust, thoroughly healthy, and withal very prosperous and victorious man." What we call genius has often a degree of eccentricity connected with it, and, as Dr. Ferriar has hinted, may even have an alliance with insanity. "No doubt," says he, "the same causes which in a strong degree produce madness, may, in a lower, increase the natural powers of the mind." High cultivation and extraordinary talents are not in themselves the certain means of goodness nor of happiness. The mind, rendered more subtle and more oppressed with thought and ambition, looks back even to its primitive simplicity with a feeling little short of regret. Byron says—

"I feel almost at times as I have felt
In happy childhood; trees, and flowers, and brooks,
Which do remember me of where I dwelt
Ere my young mind was sacrificed to books,

> Come as of yore upon me, and can melt
> My heart with recognition of their looks." *

On the other hand, the mental powers which are the farthest removed from insanity are not perhaps the most ingenious, fertile, or imaginative. The more brilliant mind which sees relations not perceptible to others—the associations of which are not too strong and constant to forbid erratic flights, may be, on that very account, the more capricious, unsettled, and uncertain in its operations—possibly, the more easily pushed from its own balance, and lost from its very want of anchorage to slow and settled, albeit erroneous, doctrines. They who have undergone great changes of opinion can alone know what it is to abandon the landmarks of thought, and go out into a sea of meditation, without any well-known beacon to guide them, or familiar appearance to mark their course. Errors may be dear, *even sacred* to the mind, and to abandon the errors which

* Poetical epistle written to his sister.

ages have nursed, may indeed be difficult to those who have cherished them from their earliest infancy.

As minds differ greatly in respect to the intellectual powers, so they differ also in regard to the affections and instinctive impulses, and these latter appear to be subject to aberrations independently of the former. The late Dr. Prichard, in a very able work on "Insanity in its Relations to Jurisprudence," has treated of the subject under the head of "Moral Insanity;" and were I to state all that I think important, I should not content myself without transcribing the greater part of what he has written. It may seem rather startling to look upon *moral* aberrations as resulting from mental infirmities. I am far from wishing to appear as an apologist for vice, but a close attention to the subject obliges me, in fairness, to admit, that the propensities and impulses of the mind may want a just balance as well as the intellectual powers. I feel that I have not here room to do justice to the subject, but I may say that

those who have given most attention to the various phases of insanity are coming to this opinion. Such views cannot, perhaps, alter materially our social relations nor penal institutions, but they will at least make our charity more broad and lasting, and our compassion for the erring more enlightened. Undoubtedly the protection of society requires that the morally insane be arrested in the career of crime; for if it *needs be that offences come*, it must also needs be that there *be woe to him through whom they come.*

The facts upon which the evidence of moral insanity rests are too striking and numerous to admit of doubt, and the subject would probably have long ago been more fully investigated, had it not been for the privacy attached to instances of this kind, and the reluctance which is naturally felt to admit a plea which appears, at least on first consideration, to have dangerous consequences.

The existence of moral insanity is recognised by Esquirol and Georget, on the continent, as

well as by Dr. Prichard, Dr. Hitch, and others, in England,—indeed, by the best authorities we have on the subject. Insanity is far from showing itself merely in hallucinations and illusions, as is commonly supposed. Often the first overt act of insanity is one of moral delinquency or extravagance, and however delicate the question may appear in a moral consideration, it is impossible to shut our eyes to the truth. In many of these instances it seems that the absence of moral control constitutes the essence of the disorder; and persons are known to conduct themselves well in asylums who, immediately on being released, give way to excesses of maniacal excitement, or betray the most ridiculous eccentricities and absurdities. I may probably, on some future occasion, return to this subject; here I can only hint at it.

Independently of this moral insanity, there are also grades of difference in the passions and propensities of the mind, less excessive, but

still worthy of study in connexion with such considerations as these.

That attachments are to some extent instinctive, would appear from the maternal fondness even of the brute creation; and it is beautiful to witness the tender offices to which it leads. There can be no doubt but that feelings of personal attachment are much stronger in some people than in others, and may even exist to a morbid degree. Sheridan, in his play called the *Rivals*, apostrophises LOVE as the tormentor and fiend, "whose influence acting on men of dull souls makes idiots of them, but meeting subtler spirits betrays their course, and urges sensibility to madness." Dramatists and novelists have in all ages amused mankind with the tragical creations of fiction, but such stories interest only because the annals of real life have also their *broken hearts*.

Perhaps one of the most beautiful delineations of human attachment in comparatively modern literature, is that of Goëthe's Margaret, in his celebrated Faust. The clinging of affec-

tion in the last hour of horror and of crime rises to a sublimity which is only heightened by the confiding simplicity of the character. The mystical and unholy career of Faust contrasts with the beautiful love of Margaret, nor can there be imagined in the downward career of destruction any reproach which can speak so eloquently as the voice of unaltered love: —

"Where I have him not,
Is the grave to me,
The whole world
Is embittered to me.

For him alone look I
Out at the window.
For him alone go I
Out of the house.

My peace is gone,
My heart is heavy,
I shall find it never,
And never more."*

How delicate is the sentiment of pity, — how exquisite the combination of sorrow and of love!

* From a prose translation of Faust.

Attachment to place may exist with more or less strength. Some persons have strong preferences for particular places, and feel, when removed, as if transplanted to an uncongenial soil, and pine for the scenes they have left.

Amongst the Swiss, love of country sometimes rises to a degree which actually impairs the health. I think Sir Walter Scott in his last illness felt, in the spirit of his own poetry, a strange yearning for the scenes of his native country, after literally "wandering on a foreign strand."

Man is, perhaps, as beautiful in the passions and affections of his nature as in the highest reach of his intellectual powers. Terrible, indeed, are the passions, but they are also glorious and lovely. The very emotions, feelings, and instinctive impulses of our nature constitute more than all else our *humanity*. The cold calculations of the strongest minds are dead, without the warm influence of affection; and we would rather pardon the froward-

ness of childhood, and the caprice of woman, than lose all those endearing sentiments which bind us to the one and to the other. But there is a maddening impulse, which breaks out fiercely, and blinds the reason, or acts in spite of it. It comes fearfully over the horizon of the mind, like a storm, and rages in cruelty and guilt. The voice of pity pleads unheeded; —but there comes a day when serenity is restored, and then all the better feelings of the heart come up as a memorial against it. It is at such times that every kind emotion and every tender sympathy of our nature bears with it a sting more terrible than reproof or revenge.

Very strong and enduring hatreds are sometimes indicative of insanity itself, especially where they are cherished without a sufficient cause. Happiness is compatible alone with a healthy balance of the mind, and the indulgence of proud hatred and uncharitable hostility is only a small remove from the ravings of the

madman, and the sound and fury "which signify nothing."

In connexion with the subject of hatred, I may mention a law of the human mind which has always appeared to me of the greatest importance—I mean, that the passions are greatly augmented by the manifestation or expression of them. I have sometimes overheard an animated conversation, passing by transitions of bitterness into the most violent quarrel, each party rather fanning his own feelings by the expression of them than listening to the abuse of his opponent.

A woman will sometimes set her arms akimbo in the street and commence in a moderate tone of reproof, but after a time she will acquire greater and greater warmth until she flies at the cap of her antagonist. This law of the mind is very apparent in Lunatic Asylums. I remember an old woman at the County Hospital at Lancaster, who is always abusive, but the first few words she says, especially to a stranger, are tranquil enough; after a little

time, however, she waxes louder and louder, and more and more vehement, although no remark or opposition may have been offered to what she has said.

A tendency to excess sometimes seems to take its origin in mental peculiarity. Where the imagination strongly predominates there is often a liability to intemperance or excess, which brings talent to contempt, and is a matter of surprise to those of more obtuse but evenly regulated minds. The fate of the unfortunate Savage has been rendered familiar to all the lovers of literature by the able pen of Johnson. Addison and Parnell are said to have drunk to excess, and Burns is well known to have given way to the same vice.

Anthony Wood, speaking of John Skelton, who, according to Erasmus, was "the light and glory of English literature," says, "that he was guilty of many crimes, *as most poets are.*" *

Carlyle, in speaking of the *literary man*, says,

* Quoted from the "Memorials of London," p. 237.

"His fame rarely exerts a favourable influence on his dignity of character, and never on his peace of mind; its glitter is external for the eyes of others; within, it is but the aliment of unrest, the oil cast upon the ever-gnawing fire of ambition, quickening into fresh vehemence the blaze which it stills for a moment. . . . . The calamities of these people are a fertile topic, and too often their faults and vices have kept pace with their calamities. Nor is it difficult to see how this has happened. Talent of any sort is generally accompanied with a peculiar fineness of sensibility. Of genius, this is the most essential constituent, and life in any shape has sorrows enough for hearts so formed."*

In conclusion, I may observe, that it is impossible, for many obvious reasons, to enter fully, in this place, into the subject of medical psychology, but it does seem to me that it is one which has not yet found its due place in human consideration.

* Life of Schiller, p. 54.

The very routine and common-place order of life are disadvantageous to reflections of such a nature.—We hear the yell of the lunatic in his ward, and see around the hideous congregation of his associates, but as we close the door the sound dies on the ear—and it fades from the recollection also. We see poverty and guilt stalking about the streets of our cities, but we step into saloons, and forget, in the forms and usages of society, the misery we shut out. There are *forms and usages* in our very thoughts, also, which stop the generous flow of nobler and better feelings. We do not love mankind as we ought, because we do not know it—or we know it only in our own selfish circle, and forget that the same pattern of humanity is abroad; sometimes great in the pride of beauty and vigour, and again miserable in depravity and crime. We respect the high-born and the successful,—we build statues to celebrate military prowess and statesman-like policy,—but we should learn, also, to love

man as *man*, to regard his failings as it becomes those whose judgments can only be made with partial knowledge and limited comprehension, and in all his wanderings still to recognise his dear humanity.

There are facts before us, respecting the habitudes of the human mind, which are as much to be relied on as any in physics, and as capable of being generalised and rendered available for practical ends. Ignorance of these facts is daily and hourly leading to cruel judgments, and to misery in all its various forms. I am glad to say that we have now a "Journal of Psychological Medicine," which will, no doubt, greatly aid in bringing about just views, and removing old and injurious notions. For my part, I most solemnly believe that there are varieties of mental constitution as great as any in outward form: and when I further consider the difference which circumstances and education produce, it appears most unfair and cruelly uncharitable to measure all by the same stan-

dard, and expect like results from different minds. Yet this is the practical effect of common notions — the doctrine which is tacitly implied in our literature and in our law. There is an old adage, that what *man has done, man may do,* but it would be ridiculous logic to interpret such a passage to signify that what *one man* has done, *every man* may do.

The abstract mind — the *general term* of logicians — I grant, has no disorders, no grades of health, no varieties of power — but of this abstraction there is nothing in nature. The mind is connected with the body, and affected by the body, and there is still a lesson of charity to be learnt from a knowledge of such an association.

There is a common cry against the doctrine of different grades of mental and moral capacity, as though it impugned the goodness of the Deity; but to me it seems only in accordance with the great plan of Divine government which commits different talents to the care of his creatures. Some men are deformed, others

good-looking — some invalids from infancy, others robust — some idiots, epileptics, insane — some rich from birth, others poor — some the descendants of a long and, may be, an honourable line of ancestors, others the children of beggars and of pick-pockets. The brains of men differ in shape and in volume; and shall the mind be the same in all?

It seems to me on such a subject that *not* to think *boldly*, is to think *unjustly*, and to fear the truth on such a question, is to imagine that the works of the *eternal* Creator have need to be veiled by the flimsy apologies of his perishing creatures.

WHILST these sheets were passing through the press, a remarkable instance of suicide occurred in Leicester, some notice of which may not be deemed irrelevant, as illustrative of the connexion of disordered imagination with accomplishment of mind.

A lady, respectable both by birth and education, experienced a succession of misfortunes, and was eventually reduced to a state of want.

Being of literary habits, she endeavoured to maintain herself by the sale of some books which she had published, but she did not meet with much success. Her means became gradually more and more limited; and one evening having experienced disappointment, she put an end to her existence with poison.

It would appear, from the papers she left behind her, that her mind was of a highly sensitive nature, and somewhat under the influence of insane feelings. How far these latter may have been cherished or evolved by misfortune, it is difficult to say. It is probable that they might, at least, have remained in subjection if it had not been for the pressure of calamities. The idea of suicide seems frequently to have entered her mind, and she had actually composed a prayer to the Almighty that no temptations might lead her to such an end.

It seems that she had written a statement of her case to Lady Peel, but the document had never been presented. At an appropriate address, which was delivered over her remains, some manuscripts were read, which show her to have been capable of high poetic feeling, but reveal also the strange

peculiarities of her mind. One extract runs thus, and will be read with interest.

"The visitor was gone, but still the glory of his presence seemed to shine on the spot — still the solitary air seemed to murmur with tremulous delight — and thus ever shall it be with those who have once, detaching themselves utterly from life, received the visit of the Angel. Faith, solitude, and space retain the splendour, and it settles like a halo round their graves. Wherever the soul can wander, the eternal soul of all things protects it still! The thoughts of souls that would aspire like hers are all prayer! Canst thou think it no sorrow, either to reject all human ties, all friendship, all love, or to see day after day friendship and love wither from our life as blossoms from the stem? Canst thou wonder how, with the power to live while the world shall last, that ere even our ordinary date be finished, we yet may prefer to die? — She arose fevered and oppressed with new thoughts which raged within her, opened the casement, and the ocean lay suffused in the stormy light; and the stillness of the heavens never more eloquently preached the morality of repose to the madness of earthly passions; the very hush seemed only to deepen the wild desires of her soul, and the solemn stars, that are mysteries in themselves, seemed, by a kindred sympathy, to agitate the

wings of the spirit, no longer contented with its thrall. As she gazed, a star shot from its brethren, and vanished from the depths of space!" *

* The particulars of this lady's death (whose name was Caroline Charlotte Veasey Gilldea), are contained in the Leicester Chronicle for the 29th of November, 1851.

THE END.

LONDON:
SPOTTISWOODES and SHAW,
New-street-Square.

THE

MEDICAL ASPECTS OF DEATH,

AND

THE MEDICAL ASPECTS

OF THE

HUMAN MIND.

BY JAMES BOWER HARRISON,

M.R.C.S.E. ETC.

FORMERLY SURGEON TO THE ARDWICK AND ANCOATS DISPENSARY, ETC. ETC.

Opinions of the Medical Press.

" Mr. HARRISON, the author of the very interesting little work before us, has succeeded in his attempt to add another stone to the pyramid so well commenced by previous inquirers. The first essay on the ' Medical Aspects of Death ' is a truly masterly account of all those appearances which simulate death, and of death itself ; — and it is written in so philosophical a spirit, that it cannot but tend to fulfil the dictum of Johnson, that ' he had found physicians to be amongst the most intelligent and well-informed of his friends.' From a production like the present it would be most difficult to find a quotation which would convey an idea of its general tendency ; but we extract the following as

a specimen of the author's mode of treating the subject. * * * * * * The second essay, which is one of *rare merit*, has been reprinted from Dr. Forbes Winslow's 'Psychological Journal.'" —*Lancet*, January 10. 1852.

"'The Medical Aspects of Death' is an excellently-written essay on the signs of death, the changes the body experiences after death, premature interment, the bodily changes which immediately precede death, the mode in which death takes place, the way in which the various suicidal agents act in inducing death, and the signs of dying. Each of these sections is illustrated by well-told anecdotes, and ornamented with most appropriate quotations. The following extract will convey to our readers a good idea of Mr. Harrison's powers and style. * * * *

"The second essay 'On the Human Mind, considered in some of its Medical Aspects,' is well written, and will well repay reading. It was originally published in the 'Psychological Journal.'"—*Medical Times and Gazette*, January 24. 1852.

"In the elegant little volume now before us, bearing the above title, Mr. Harrison, of Manchester, already very favourably known as a medical writer, presents an interesting view of two important aspects of mortality. The latter, 'On the Medical Aspects of the Mind of Man,' a most able essay, has already appeared in the pages of our excellent contemporary, the 'Psychological Journal,' and we doubt not has there fallen under the observation of the majority of our readers. The former contains first an excellent *resumé* of the signs of death, a subject which has lately been very fully investigated, chiefly by the French physiologists, and the important results arrived at by whom we have recently noticed at length; second, a review of the causes of death, or the mode in which life terminates; and third, a notice of the antecedent symptoms of death, or the bodily changes which immediately precede it. The entire is written in a highly philosophic spirit, containing throughout, not alone judicious observations on the intimate link between life and death, which do honour to the

author, but valuable medical hints. We cordially commend the tone and character of these essays, and we earnestly press their perusal on the profession. Indeed they may be read too, with advantage, by the non-professional public."— *Dublin Quarterly Medical Journal*, February, 1852.

"In this little volume, Mr. Harrison presents us with a couple of remarkably readable and pleasantly-written essays on two subjects, neither of which it is easy to treat pleasantly. In his preface, the author *naïvely* observes that he has 'never thought it essential that a book should be dry in order to be useful.' We think that he has produced a useful book: we are sure that he has not added to the stock of dry ones.

"In the first essay, the premonitory signs of death, the several modes in which death is occasioned, and the indications of death having really taken place, are discussed with an absence of disagreeable detail, and yet with a fulness of description, that bespeak a skilful and not unpractised hand. We do not know of any other work in which the unprofessional reader could meet with the same information so intelligibly and pleasingly conveyed, nor in which the medical man would find the subject so appositely garnished with anecdotes and classical illustrations. * * *

"The second essay touches pointedly, but gently, upon the slighter deviations from health of mind, such as, not constituting acknowledged insanity, are still indicative of disorder of the mental balance. To do justice to Mr. Harrison's mode of treating his subject, we should have to transcribe his essay. We need scarcely say that we commend this work to our readers. It is such as we may frequently find convenient to place in the hands of our more intelligent patients. The author has managed to combine the *utile* with the *dulce* in a way *which must ensure success.*"— *Provincial, Medical, and Surgical Journal*, March 3. 1852.

LONDON:

LONGMAN, BROWN, GREEN, AND LONGMANS.

By the same Author,

POPULAR MEDICAL ERRORS.

Price 3s. 6d.

LONDON: LONGMAN AND CO.

SOME REMARKS

ON

THE CONTAMINATION OF WATER WITH THE POISON OF LEAD.

LONDON: CHURCHILL.

LETTER TO THE EARL OF SHAFTESBURY

ON THE INJURIOUS EFFECTS OF

THE MANUFACTURE OF LUCIFER MATCHES, &c. &c.

MANCHESTER: HAYCRAFT.

AN ALPHABETICAL CATALOGUE

OF

NEW WORKS

IN GENERAL AND MISCELLANEOUS LITERATURE,

PUBLISHED BY

MESSRS. LONGMAN, BROWN, GREEN, AND LONGMANS,

PATERNOSTER ROW, LONDON.

CLASSIFIED INDEX.

Agriculture and Rural Affairs.

	Pages
Bayldon on Valuing Rents, etc.	6
Caird's Letter on Agriculture	7
Cecil's Stud Farm	8
Loudon's Encyclopædia of Agriculture	17
,, Self-Instruction for Farmers, etc.	16
,, (Mrs.) Lady's Country Companion	16
Low's Elements of Agriculture	17
,, On Landed Property	17

Arts, Manufactures, and Architecture.

Addison's Knights Templars	5
Bourne's Catechism of the Steam Engine	6
Brande's Dictionary of Science, etc.	6
Cresy's Encycl. of Civil Engineering	8
Eastlake on Oil Painting	9
Gwilt's Encyclopædia of Architecture	11
Jameson's Sacred and Legendary Art	13, 14
Loudon's Rural Architecture	17
Moseley's Engineering and Architecture	21
Steam Engine (The), by the Artisan Club	5
Tate on Strength of Materials	28
Ure's Dictionary of Arts, etc.	31

Biography.

Baines's Life of Baines	6
Bunsen's Hippolytus	7
Foss's Judges of England	10
Holcroft's Memoirs	29
Holland's (Lord) Memoirs	12
Lardner's Cabinet Cyclopædia	15
Maunder's Biographical Treasury	20
Southey's Life of Wesley	27
,, Life and Correspondence	27
Stephen's Ecclesiastical Biography	28
Taylor's Loyola	30
,, Wesley	30
Townsend's Twelve eminent Judges	31
Waterton's Autobiography and Essays	31

Books of General Utility.

Acton's (Eliza) Cookery Book	5
Black's Treatise on Brewing	6
Cabinet Lawyer (The)	7
Hints on Etiquette	12
Hudson's Executor's Guide	13
,, On Making Wills	13
Lardner's Cabinet Cyclopædia	15
Loudon's Self Instruction	16
,, (Mrs.) Amateur Gardener	16
Maunder's Treasury of Knowledge	20
,, Scientific and Literary Treasury	19
,, Treasury of History	19
,, Biographical Treasury	20
,, Natural History	19
Pocket and the Stud	11
Pycroft's Course of English Reading	23
Reece's Medical Guide	23
Rich's Companion to the Latin Dictionary	23
Riddle's Latin Dictionaries and Lexicon	24
,, and Freund's Latin Lexicon	24
Rogers's Vegetable Cultivator	24
Roget's English Thesaurus	25
Rowton's Debater	26
Short Whist	26
Stud (The) for Practical Purposes	11
Thomson's Interest Tables	30
Traveller's Library	29
Webster's Encycl. of Domestic Economy	32

Botany and Gardening.

Conversations on Botany	8
Hooker's British Flora	12
,, Guide to Kew Gardens	12
Lindley's Introduction to Botany	16
Loudon's Hortus Britannicus	17
,, Encyclopædia of Trees & Shrubs	17
,, ,, Gardening	17
,, Encyclopædia of Plants	17
,, Self-Instruction for Gardeners	16
,, (Mrs.) Amateur Gardener	16
Rivers's Rose Amateur's Guide	24
Rogers's Vegetable Cultivator	24

Chronology.

Blair's Chronological Tables	6
Bunsen's Ancient Egypt	7
Haydn's Book of Dignities	11
Nicolas's Chronology of History	15

Commerce and Mercantile Affairs.

Francis's Bank of England	10
,, English Railway	10
,, Stock Exchange	10
Lindsay's Navigation Laws	16
Lorimer's Letters to a Master Mariner	16
M'Culloch's Dictionary of Commerce	18
Steel's Shipmaster's Assistant	28
Symons' Merchant Seamen's Law	28
Thomson's Tables of Interest	30

London: Printed by M. MASON, Ivy Lane, Paternoster Row.

Criticism, History, and Memoirs.

	Pages
Addison's Knights Templars	5
Balfour's Sketches of Literature	6
Blair's Chron. and Historical Tables	6
Bunsen's Ancient Egypt	7
,, Hippolytus	7
Conybeare and Howson's St. Paul	8
Dennistoun's Dukes of Urbino	9
Eastlake's History of Oil Painting	9
Foss's Judges of England	10
Francis's Bank of England	10
,, English Railway	10
,, Stock Exchange	10
Gurney's Historical Sketches	11
Harrison On the English Language	11
Holland's (Lord) Foreign Reminiscences	12
,, ,, Whig Party	12
Jeffrey's (Lord) Contributions	14
Kemble's Anglo-Saxons in England	14
Lardner's Cabinet Cyclopædia	15
Macaulay's Essays	18
,, History of England	17
Mackintosh's Miscellaneous Works	18
M'Culloch's Dictionary, Historical, Geographical, and Statistical	18
Maunder's Treasury of History	19
Merivale's History of Rome	20
Mosheim's Ecclesiastical History	21
Mure's Ancient Greece	21
Rich's Companion to the Latin Dictionary	23
Riddle's Latin Dictionaries	24
,, and Freund's Latin Lexicon	24
Rogers's Essays from the Edinburgh Rev.	24
Roget's English Thesaurus	25
Schmitz's History of Greece	30
Schomberg's Theocratic Philosophy	25
Shepherd's Church of Rome	26
Sinclair's Popish Legends	26
Smith's (S.) Lectures on Moral Philosophy	26
Southey's The Doctor etc.	27
Stephen's Essays in Ecclesiastical Biography	29
,, Lectures on the History of France	28
Sydney Smith's Works	26
Taylor's Loyola	30
,, Wesley	30
Thirlwall's History of Greece	30
Tooke's Histories of Prices	31
Townsend's State Trials	31
Turner's Anglo-Saxons	31
,, Sacred History of the World	31
Zumpt's Latin Grammar	32

Geography and Atlases.

Butler's Ancient and Modern Geography	7
,, Atlas of General Geography	7
Carpenter's Varieties of Mankind	7
Erman's Travels through Siberia	10
Hall's Large Library Atlas	11
Johnston's General Gazetteer	14
M'Culloch's Geographical Dictionary	18
Murray's Encyclopædia of Geography	21
Sharp's British Gazetteer	26

Juvenile Books.

Amy Herbert	25
Corner's Children's Sunday Book	8
Earl's Daughter (The)	25
Gertrude	25
Howitt's Boy's Country Book	13
,, Children's Year	13
Laneton Parsonage	25
Mrs. Marcet's Conversations	19
Margaret Percival	25
Marryat's Masterman Ready	19
,, Privateer's-Man	19
,, Settlers in Canada	19
,, Mission; or, Scenes in Africa	19
Pycroft's Course of English Reading	23

Medicine.

Bull's Hints to Mothers	7
,, Management of Children	7
Carpenter's Varieties of Mankind	7
Copland's Dictionary of Medicine	8
Holland's Medical Physiology	12
Latham On Diseases of the Heart	16
Moore On Health, Disease, and Remedy	20
Pereira On Food and Diet	22
Reece's Medical Guide	23

Miscellaneous and General Literature.

Bailey's Discourses	5
,, Theory of Reasoning	5
Carpenter's Varieties of Mankind	7
Graham's English	10
Haydn's Beatson's Index	11
Holland's Medical Physiology	12
Hooker's Kew Guide	12
Howitt's Rural Life of England	13
,, Visits to Remarkable Places	13
Jeffrey's (Lord) Contributions	14
Lardner's Cabinet Cyclopædia	15
Loudon's (Mrs.) Lady's Country Companion	16
Macaulay's Critical and Historical Essays	18
Mackintosh's (Sir J.) Miscellaneous Works	18
Maitland's Church in the Catacombs	18
Pascal's Works, by Pearce	22
Pycroft's Course of English Reading	23
Rich's Companion to the Latin Dictionary	23
Riddle's Latin Dictionaries and Lexicon	24
,, and Freund's Latin Lexicon	24
Rowton's Debater	25
Seaward's Narrative of his Shipwreck	25
Sir Roger De Coverley	26
Southey's Common-Place Books	27
,, The Doctor etc.	27
Stow's Training System	28
Sydney Smith's Works	26
Townsend's State Trials	31
Willoughby's (Lady) Diary	32
Zincke's School of the Future	32
Zumpt's Latin Grammar	32

Natural History in General.

Catlow's Popular Conchology	7
Ephemera and Young on the Salmon	10
Gosse's Natural History of Jamaica	10
Kirby and Spence's Entomology	14
Lee's Elements of Natural History	16
Maunder's Treasury of Natural History	19
Turton's Shells of the British Islands	31
Waterton's Essays on Natural History	32
Youatt's The Dog	32
,, The Horse	32

Novels and Works of Fiction.

	Pages
Lady Willoughby's Diary	32
Macdonald's Villa Verocchio	18
Marryat's Masterman Ready	19
,, Privateer's-Man	19
,, Settlers in Canada	19
,, Mission; or, Scenes in Africa	19
Sir Roger De Coverley	26
Southey's The Doctor etc.	27

One Vol. Encyclopædias and Dictionaries.

	Pages
Blaine's, of Rural Sports	6
Brande's, of Science, Literature, and Art	6
Copland's, of Medicine	8
Cresy's, of Civil Engineering	8
Gwilt's, of Architecture	11
Johnston's Geographical Dictionary	16
London's, of Trees and Shrubs	17
,, of Gardening	17
,, of Agriculture	17
,, of Plants	17
,, of Rural Architecture	17
M'Culloch's Geographical Dictionary	18
,, Dictionary of Commerce	18
Murray's Encyclopædia of Geography	21
Sharp's British Gazetteer	26
Ure's Arts, Manufactures, and Mines	31
Webster's Domestic Economy	32

Poetry and the Drama.

	Pages
Aikin's (Dr.) British Poets	5
Baillie's (Joanna) Poetical Works	5
Dante, by Cayley	8
Flowers and their Kindred Thoughts	22
Fruits from the Garden and Field	22
Goldsmith's Poems, illustrated	10
L. E. L.'s Poetical Works	14
Linwood's Anthologia Oxonienais	16
Macaulay's Lays of Ancient Rome	18
Mackay's Poetry of the English Lakes	18
Montgomery's Poetical Works	20
Moore's Irish Melodies	21
,, Lalla Rookh	21
,, Poetical Works	20
,, Songs and Ballads	20
Shakspeare, by Bowdler	26
,, 's Sentiments and Similes	13
Southey's Poetical Works	27
,, British Poets	28
Swain's English Melodies	28
Tasso, by Smith	27
Thomson's Seasons, illustrated	30
Watts's Lyrics of the Heart	32
Winged Thoughts	22

Political Economy and Statistics.

	Pages
Caird's English Agriculture	7
Francis's Bank of England	10
,, English Railway	10
,, Stock Exchange	10
Laing's Denmark and the Duchies	14
,, Notes of a Traveller	14
Lindsay's Navigation Laws	16
M'Culloch's Geographical, Statistical, and Historical Dictionary	18
M'Culloch's Dictionary of Commerce	18
,, London	20
,, On Taxation and Funding	18
,, Statistics of the British Empire	18
Marcet's Conversations on Polit. Economy	19
Pashley on Pauperism	23
Tooke's History of Prices	31

Religious and Moral Works, etc.

	Pages
Amy Herbert	25
Bloomfield's Greek Testament	6
,, Annotations on ditto	6
,, College and School ditto	6
Cllisold on the Apocalypse	8
Conybeare and Howson's St. Paul	8
Corner's Sunday Book	8
Cox's Protestantism and Romanism	8
Dale's Domestic Liturgy	9
Discipline	9
Earl's Daughter (The)	25
Englishman's Hebrew Concordance	19
,, Greek Concordance	19
Gertrude	25
Hook's (Dr.) Lectures on Passion Week	12
Horne's Introduction to the Scriptures	12
,, Compendium of ditto	12
Jameson's Sacred and Legendary Art	13
,, Monastic Legends	13
,, Legends of the Madonna	14
Jeremy Taylor's Works	14
Laneton Parsonage	25
Letters to my Unknown Friends	16
,, on Happiness	16
Maitland's Church in the Catacombs	18
Margaret Percival	26
Moore on the Power of the Soul	20
,, on the Use of the Body	20
,, on Man and his Motives	20
Mosheim's Ecclesiastical History	21
Neale's Closing Scene	22
,, Resting Places of the Just	21
,, Riches that bring no Sorrow	21
Newman's (J. H.) Discourses	22
Pascal's Works, by Pearce	22
Readings for Lent	14
Robinson's Lexicon of the Greek Testament	24
Schomberg's Theocratic Philosophy	25
Shepherd's Church of Rome	26
Sinclair's Journey of Life	26
,, Popish Legends	26
Smith's (J.) St. Paul's Shipwreck	27
,, (S.) Lectures on Moral Philosophy	28
Southey's Life of Wesley	27
Stephen's (Sir J.) Essays in Ecclesiastical Biography	28
Tayler's (Rev. C. B.) Margaret	30
,, ,, Lady Mary	30
Taylor's (J.) Thumb Bible	30
,, (Isaac) Loyola	30
,, Wesley	30
Tomline's Introduction to the Bible	31
Turner's Sacred History	31
Willoughby's (Lady) Diary	32

Rural Sports.

	Pages
Blaine's Dictionary of Sports	6
Cecil's Stud Farm	8
The Cricket Field	9
Ephemera on Angling	10
,, 's Book of the Salmon	10

	Pages
Hawker's Instructions to Sportsmen	11
The Hunting Field	11
Loudon's Lady's Country Companion	16
Pocket and the Stud	11
Practical Horsemanship	11
Pulman's Fly-Fishing	23
Ronalds's Fly-Fisher	25
Stable Talk and Table Talk	11
The Stud, for Practical Men	11
Wheatley's Rod and Line	32

The Sciences in General and Mathematics.

Bourne's Catechism of the Steam Engine	6
Brande's Dictionary of Science, etc.	6
DelaBeche on the Geology of Cornwall, etc.	9
,, 's Geological Observer	9
De la Rive's Electricity	9
Herschel's Outlines of Astronomy	12
Humboldt's Aspects of Nature	13
,, Cosmos	13
Holland's Medical Physiology	12
Lardner's Cabinet Cyclopædia	15
,, Great Exhibition	14
Marcet's Conversations	19
Moseley's Practical Mechanics	21
,, Engineering and Architecture	21
Owen's Comparative Anatomy	22
Peschel's Physics	23
Phillips's Palæozoic Fossils of Cornwall, etc.	23
Portlock's Geology of Londonderry	23
Smee's Electro-Metallurgy	26
Steam Engine (Ure), by the Artisan Club	5
Tate on Strength of Materials	28
,, Exercises on Mechanics	28
Thomson's School Chemistry	30

Veterinary Medicine.

	Pages
Cecil's Stud Farm	8
The Hunting Field	11
The Pocket and the Stud	11
Practical Horsemanship	11
Stable Talk and Table Talk	11
The Stud for Practical Purposes	11
Youatt's The Dog	32
,, The Horse	32

Voyages and Travels.

Chesney's Euphrates and Tigris	8
Davis's China	9
Esthen	10
Erman's Travels through Siberia	10
Forbes's Dahomey	10
Forester and Biddulph's Norway	10
Huc's Tartary, Thibet, and China	29
Humboldt's Aspects of Nature	13
Jameson's Canada	29
Laing's Denmark	14
,, Norway	30
,, Notes of a Traveller	14
Lardner's London	14
Mackay's English Lakes	18
Osborn's Arctic Journal	22
Pfeiffer's Voyage round the World	30
Power's New Zealand Sketches	23
Richardson's Overland Journey	24
Rovings in the Pacific	25
Seaward's Narrative of his Shipwreck	26
Snow's Arctic Voyage	27
Traveller's Library	29
Werne's African Wanderings	29

AN ALPHABETICAL CATALOGUE

OF

NEW WORKS AND NEW EDITIONS

PUBLISHED BY

MESSRS. LONGMAN, BROWN, GREEN, AND LONGMANS.

MISS ACTON, MODERN COOKERY-BOOK.

Modern Cookery in all its Branches, reduced to a System of Easy Practice. For the use of Private Families. In a Series of Practical Receipts, all of which have been strictly tested, and are given with the most minute exactness. By Eliza Acton. New Edition; with Directions for Carving, and other Additions. Foolscap 8vo. with Plates and Woodcuts, 7*s.* 6*d.* cloth.

ADDISON.—THE HISTORY OF THE KNIGHTS TEMPLARS,

By C. G. Addison, of the Inner Temple, Esq., Barrister-at-Law. Third Edition, corrected and improved: with Four Lithographic and Three Woodcut Illustrations. Square crown 8vo. 10*s.* 6*d.* cloth.

AIKIN.—SELECT WORKS OF THE BRITISH POETS:

From Ben Jonson to Coleridge. With Biographical and Critical Prefaces by Dr. Aikin. A New Edition; with additional Selections, from more recent Poets, by Lucy Aikin. Medium 8vo. 18*s.* cloth.

THE ARTISAN CLUB.—A TREATISE ON THE STEAM-ENGINE,

in its Application to Mines, Mills, Steam Navigation, and Railways. By the Artisan Club. Edited by John Bourne, C.E. New Edition. With 30 Steel Plates, and about 350 Wood Engravings. 4to. 27*s.* cloth.

BAILEY.—DISCOURSES ON VARIOUS SUBJECTS,

Read before Literary and Philosophical Institutions. By Samuel Bailey, Author of "Essays on the Pursuit of Truth," etc. 8vo. 8*s.* 6*d.* cloth.

BAILEY.—THE THEORY OF REASONING.

By Samuel Bailey, Author of "Essays on the Pursuit of Truth," etc. Second Edition. 8vo. 7*s.* 6*d.* cloth.

JOANNA BAILLIE'S DRAMATIC AND POETICAL WORKS.

Now first collected; complete in One Volume; and comprising the Plays of the Passions, Miscellaneous Dramas, Metrical Legends, Fugitive Pieces (including several now first published), and Ahalya Baee. Uniform with the New Edition of *James Montgomery's Poetical Works*; with Portrait engraved in line by H. Robinson, and Vignette. Square crown 8vo. 21*s.* cloth; or 42*s.* handsomely bound in morocco by Hayday.

BAINES.—THE LIFE OF EDWARD BAINES,
late M.P. for the Borough of Leeds. By his Son, Edward Baines, Author of "The History of the Cotton Manufacture." With a Portrait, engraved in line by Greatbach. 8vo. 9s. cloth.

BALFOUR.—SKETCHES OF ENGLISH LITERATURE,
from the Fourteenth to the Present Century. By Clara Lucas Balfour, Author of "Women of Scripture," "Moral Heroism," etc. Foolscap 8vo. 7s. cloth.

BAYLDON'S ART OF VALUING RENTS AND TILLAGES,
and Tenant's Right of Entering and Quitting Farms, explained by several Specimens of Valuations; with Remarks on the Cultivation pursued on Soils in different Situations. Adapted to the Use of Landlords, Land-Agents, Appraisers, Farmers, and Tenants. New Edition, corrected and revised by John Donaldson. 8vo. 10s. 6d. cloth.

BLACK.—A PRACTICAL TREATISE ON BREWING,
Based on Chemical and Economical Principles: with Formulæ for Public Brewers, and Instructions for Private Families. By William Black, Practical Brewer. New Edition, with considerable Additions. 8vo. 10s. 6d. cloth.

BLAINE'S ENCYCLOPÆDIA OF RURAL SPORTS;
Or, a complete Account, Historical, Practical, and Descriptive, of Hunting, Shooting, Fishing, Racing, and other Field Sports and Athletic Amusements of the present day. A New and thoroughly revised Edition (1852), corrected to the Present Time; with copious Additions and Improvements, and numerous additional Illustrations. The Hunting, Racing, and all relative to Horses and Horsemanship, revised by *Harry Hieover*; Shooting and Fishing by *Ephemera*; and Coursing by Mr. A. Graham. With upwards of 600 Woodcuts. 8vo. 50s. half-bound.

BLAIR'S CHRONOLOGICAL AND HISTORICAL TABLES,
From the Creation to the present Time: with Additions and Corrections from the most authentic Writers; including the Computation of St. Paul, as connecting the Period from the Exode to the Temple. Under the revision of Sir Henry Ellis, K.H., Principal Librarian of the British Museum. New Edition, with Corrections. Imperial 8vo. 31s. 6d. half-bound in morocco.

BLOOMFIELD.—THE GREEK TESTAMENT:
With copious English Notes, Critical, Philological, and Explanatory. Formed for the use of advanced Students of Divinity and Candidates for Holy Orders. By the Rev. S. T. Bloomfield, D.D. F.S.A. New Edition. 2 vols. 8vo. with a Map of Palestine, 40s. cloth.

THE REV. DR. BLOOMFIELD'S ADDITIONAL ANNOTATIONS ON THE NEW TESTAMENT: being a Supplement to his Edition of the Greek Testament with English Notes, in 2 vols. 8vo. So arranged as to be divisible into Two Parts, each of which may be bound up with the Volume of the Greek Testament to which it refers. 8vo. 15s. cloth.

BLOOMFIELD.—THE GREEK TESTAMENT FOR COLLEGES
AND SCHOOLS; with shorter English Notes, Critical, Philological, and Explanatory. By the Rev. S. T. Bloomfield, D.D. New Edition, enlarged, with a New Map and an Index. Foolscap 8vo. 10s. 6d. cloth.

BOURNE.—A CATECHISM OF THE STEAM-ENGINE,
Illustrative of the Scientific Principles upon which its Operation depends, and the Practical Details of its Structure, in its Applications to Mines, Mills, Steam Navigation, and Railways; with various Suggestions of Improvement. By John Bourne, C.E. Editor of "The Artisan Club's Treatise on the Steam-Engine." Third Edition, revised and corrected. Foolscap 8vo. 6s. cloth.

BRANDE.—A DICTIONARY OF SCIENCE, LITERATURE,
AND ART: Comprising the History, Description, and Scientific Principles of every Branch of Human Knowledge; with the Derivation and Definition of all the Terms in general use. Edited by W. T. Brande, F.R.S.L. and E.; assisted by Dr. J. Cauvin. A new and thoroughly revised Edition, corrected to the Present Time. 8vo. with Woodcuts.
[*In April.*

BULL.—HINTS TO MOTHERS.

For the Management of their Health during the Period of Pregnancy and in the Lying-in Room: with an Exposure of Popular Errors in connexion with those subjects, etc.; and Hints upon Nursing. By Thomas Bull, M.D. New Edition, carefully revised and enlarged. Foolscap 8vo. 5s. cloth.

BULL.—THE MATERNAL MANAGEMENT OF CHILDREN.

In HEALTH and DISEASE. By Thomas Bull, M.D. late Physician Accoucheur to the Finsbury Midwifery Institution. New Edition, revised and enlarged. Fcap. 8vo. 5s. cloth.

BUNSEN.—HIPPOLYTUS AND HIS AGE;

Or, Doctrine and Practice of the Church of Rome under Commodus and Alexander Severus. With an Appendix, containing J. Bernaysii Bonnenais Epistola Critica ad Bunsenium. By C. C. J. Bunsen, D.C.L. 2 vols. post 8vo. [*Nearly ready.*

BUNSEN.—EGYPT'S PLACE IN UNIVERSAL HISTORY.

An Historical Investigation, in Five Books. By C. C. J. Bunsen, D. Ph. and D.C.L. Translated from the German, by C. H. Cottrell, Esq. M.A. Vol. I. containing the First Book, or Sources and Primeval Facts of Egyptian History; with an Egyptian Grammar and Dictionary, and a complete List of Hieroglyphical Signs; an Appendix of Authorities, embracing the complete Text of Manetho and Eratosthenes, Ægyptiaca from Pliny, Strabo, etc.; and Plates representing the Egyptian Divinities. With many Illustrations. 8vo. 28s. cloth.

BISHOP BUTLER'S SKETCH OF MODERN AND ANCIENT

GEOGRAPHY, for the use of Schools. An entirely new Edition, carefully revised throughout, with such Alterations introduced as continually progressive Discoveries and the latest Information have rendered necessary. Edited by the Author's Son, the Rev. T. Butler, Rector of Langar. 8vo. 9s. cloth.

BISHOP BUTLER'S GENERAL ATLAS OF MODERN AND

ANCIENT GEOGRAPHY. Comprising Fifty-one full-coloured Maps; with complete Indexes. New Edition, nearly all re-engraved, enlarged, and greatly improved; with Corrections from the most authentic Sources in both the Ancient and Modern Maps, many of which are entirely new. Edited by the Author's Son, the Rev. T. Butler. Royal 4to. 24s. half-bound.

Separately { The Modern Atlas, 28 full-coloured Maps. Royal 8vo. 12s. half-bound.
{ The Ancient Atlas, 23 full-coloured Maps. Royal 8vo. 12s. half-bound.

THE CABINET LAWYER.

A Popular Digest of the Laws of England, Civil and Criminal; with a Dictionary of Law Terms, Maxims, Statutes, and Judicial Antiquities; Correct Tables of Assessed Taxes, Stamp Duties, Excise Licences, and Post-Horse Duties; Post-Office Regulations, and Prison Discipline. Fifteenth Edition, with Supplements; enlarged, and corrected throughout: With the Statutes of the last Session and Legal Decisions to Michaelmas Term, 14 and 15 Victoria. Fcap. 8vo. 10s. 6d. cloth.

CAIRD.—ENGLISH AGRICULTURE IN 1850 AND 1851:

Its Condition and Prospects. With Descriptions in detail of the best modes of Husbandry practised in nearly every County in England. By James Caird, of Baldoon, Agricultural Commissioner of *The Times*; Author of "High Farming under Liberal Covenants." 8vo. 14s. cloth.

CARPENTER.—VARIETIES OF MANKIND:

Or, an Account of the Distinctive Characters of the principal Races of Men. By W. B. Carpenter, M.D., F.R.S., F.G.S., Examiner in Physiology in the University of London. With numerous Engravings on Wood. Being Dr. Carpenter's Article on the Varieties of Mankind, reprinted, with Alterations and Additions, from "Todd's Cyclopædia of Anatomy and Physiology." Post 8vo. [*In preparation.*

CATLOW.—POPULAR CONCHOLOGY;

Or, the Shell Cabinet arranged: being an Introduction to the modern System of Conchology: with a sketch of the Natural History of the Animals, an Account of the Formation of the Shells, and a complete Descriptive List of the Families and Genera. By Agnes Catlow. With 312 Woodcuts. Foolscap 8vo. 10s. 6d. cloth.

CAYLEY.—DANTE'S DIVINE COMEDY.—THE VISION OF HELL. Translated in the Original Ternary Rhyme. By C. B. Cayley, B.A. Foolscap 8vo. 6*s.* cloth.

CECIL.—THE STUD FARM; OR, HINTS ON BREEDING HORSES FOR THE TURF, THE CHASE, AND THE ROAD. Addressed to Breeders of Race Horses and Hunters, Landed Proprietors, and especially to Tenant Farmers. By Cecil. With Frontispiece; uniform with Harry Hieover's *Practical Horsemanship*. Fcap. 8vo. 5*s.* half-bound.

CHESNEY.—THE EXPEDITION FOR THE SURVEY OF THE RIVERS EUPHRATES AND TIGRIS, carried on by order of the British Government, in the Years 1835, 1836, and 1837. By Lieut.-Col. Chesney, R.A. F.R.S., Commander of the Expedition. Vols. I. and II. in royal 8vo., with a coloured Index Map, and numerous Plates and Woodcuts, 63*s.* cloth.

Also, an Atlas of Thirteen Charts of the Expedition, price 1*l.* 11*s.* 6*d.* in case.

**** *The entire work will consist of Four Volumes, royal 8vo. embellished with Ninety-seven Plates, besides numerous Woodcut Illustrations, from Drawings chiefly made by Officers employed in the Surveys.*

CLISSOLD.—THE SPIRITUAL EXPOSITION OF THE APOCALYPSE, as derived from the Writings of the Hon. Emanuel Swedenborg; illustrated and confirmed by Ancient and Modern Authorities. By the Rev. Augustus Clissold, M.A., formerly of Exeter College, Oxford. 4 vols. Two Guineas, cloth.

CONVERSATIONS ON BOTANY.
New Edition, Improved. Foolscap 8vo. with 22 Plates, 7*s.* 6*d.* cloth; with coloured Plates, 12*s.*

CONYBEARE AND HOWSON.—THE LIFE AND EPISTLES OF ST. PAUL; Comprising a complete Biography of the Apostle, and a Paraphrastic Translation of his Epistles inserted in Chronological order. Edited by the Rev. W. J. Conybeare, M.A. late Fellow of Trinity College, Cambridge; and the Rev. J. S. Howson, M.A. late Principal of the Collegiate Institution, Liverpool. With Engravings on Steel and Wood of the Principal Places visited by the Apostle, from Original Drawings made on the spot by W. H. Bartlett; and numerous Maps, Charts, Woodcuts of Coins, etc. The First Volume: with Eighteen Steel Plates, Nine Maps and Plans, and numerous Woodcuts. 4to. 28*s.* cloth.

**** *To form Two Volumes, in course of publication in about Twenty Parts, price 2s. each; of which Seventeen are now ready.*

COPLAND.—A DICTIONARY OF PRACTICAL MEDICINE.
Comprising General Pathology, the Nature and Treatment of Diseases, Morbid Structures, and the Disorders especially incidental to Climates, to Sex, and to the different Epochs of Life, with numerous approved Formulæ of the Medicines recommended. By James Copland, M.D., etc. etc. Vols. I. and II. 8vo. 3*l.* cloth; and Parts X. to XV. 4*s.* 6*d.* each.

CORNER.—THE CHILDREN'S OWN SUNDAY-BOOK.
By Miss Julia Corner, Author of "Questions on the History of Europe," etc. With Two Illustrations engraved on Steel. Square fcap. 8vo. 5*s.* cloth.

COX.—PROTESTANTISM AND ROMANISM CONTRASTED BY THE ACKNOWLEDGED AND AUTHENTIC TEACHING OF EACH RELIGION. Edited by the Rev. John Edmund Cox, M.A., F.S.A., of All Souls' College, Oxford; Vicar of St. Helen's, Bishopsgate, London. 2 vols. 8vo. 28*s.* cloth.

CRESY.—AN ENCYCLOPÆDIA OF CIVIL ENGINEERING, HISTORICAL, THEORETICAL, and PRACTICAL. By Edward Cresy, F.S.A. C.E. In One very large Volume, illustrated by upwards of Three Thousand Engravings on Wood, explanatory of the Principles, Machinery, and Constructions which come under the Direction of the Civil Engineer. 8vo. 3*l.* 13*s.* 6*d.* cloth.

THE CRICKET-FIELD;

Or, the Science and History of the Game. Illustrated with Diagrams, and enlivened with Anecdotes. By the Author of "Principles of Scientific Batting," etc. With Two Engravings on Steel; uniform with *Harry Hieover's Hunting Field*. Fcap. 8vo. 5*s*. half-bound.

DALE.—THE DOMESTIC LITURGY AND FAMILY CHAPLAIN:

in Two Parts: the First Part being Church Services adapted for Domestic Use, with Prayers for every Day of the Week, selected exclusively from the Book of Common Prayer. Part II. comprising an appropriate Sermon for every Sunday in the Year. By the Rev. Thomas Dale, M.A., Canon-Residentiary of St. Paul's Cathedral. 2d Edition. Post 4to. 21*s*. cloth; or, bound by Hayday, 31*s*. 6*d*. calf lettered; 50*s*. morocco.

Separately { THE FAMILY CHAPLAIN, price 12*s*. cloth.
THE DOMESTIC LITURGY, price 10*s*. 6*d*. cloth.

DAVIS.—CHINA DURING THE WAR AND SINCE THE PEACE.

By Sir J. F. Davis, Bart., late Her Majesty's Plenipotentiary in China; Governor and Commander-in-Chief of the Colony of Hong-Kong. 2 vols. post 8vo. with Maps and Wood Engravings. [*In the press.*

DELABECHE.—THE GEOLOGICAL OBSERVER.

By Sir Henry T. Delabeche, F.R.S. Director-General of the Geological Survey of the United Kingdom. In One large Volume, with many Wood Engravings. 8vo. 18*s*. cloth.

DELABECHE.—REPORT ON THE GEOLOGY OF CORNWALL, DEVON AND WEST SOMERSET.

By Sir Henry T. De la Beche, F.R.S. etc., Director-General of the Geological Survey of the United Kingdom. Published by Order of the Lords Commissioners of H. M. Treasury. 8vo. with Maps, Woodcuts, and 12 large Plates, 14*s*. cloth.

DE LA RIVE'S WORK ON ELECTRICITY.—A TREATISE ON ELECTRICITY; ITS THEORY AND PRACTICAL APPLICATION.

By A. De la Rive, of the Academy of Geneva. Illustrated with numerous Wood Engravings. 2 vols. 8vo. [*In the press.*

DENNISTOUN.—MEMOIRS OF THE DUKES OF URBINO;

Illustrating the Arms, Arts, and Literature of Italy, from MCCCCXL. to MDCXXX. By James Dennistoun, of Dennistoun. With numerous Portraits, Plates, Fac-similes, and Engravings on Wood. 3 vols. square crown 8vo. 2*l*. 8*s*. cloth.

DISCIPLINE.

By the Author of "Letters to my Unknown Friends," "Twelve Years Ago," "Some Passages from Modern History," and "Letters on Happiness." Second Edition, enlarged. 18mo. 2*s*. 6*d*. cloth.

EASTLAKE.—MATERIALS FOR A HISTORY OF OIL PAINTING.

By Charles Lock Eastlake, Esq. P.R.A. F.R.S. F.S.A. Secretary to the Royal Commission for Promoting the Fine Arts in connexion with the rebuilding of the Houses of Parliament, etc. 8vo. 16*s*. cloth.

*** *Vol. II. On the Italian Practice of Oil Painting, is preparing for publication.*

THE ENGLISHMAN'S GREEK CONCORDANCE OF THE NEW TESTAMENT;

being an attempt at a Verbal Connexion between the Greek and the English Texts; including a Concordance to the Proper Names, with Indexes, Greek-English and English-Greek. Second Edition, carefully revised; with a new Index, Greek and English. Royal 8vo. 42*s*.

THE ENGLISHMAN'S HEBREW AND CHALDEE CONCORDANCE OF THE OLD TESTAMENT;

being an attempt at a Verbal Connexion between the Original and the English Translations: with Indexes, a List of the Proper Names and their Occurrences, etc. etc. 2 vols. royal 8vo. 3*l*. 13*s*. 6*d*. cloth; large paper, 4*l*. 14*s*. 6*d*.

EPHEMERA.—THE BOOK OF THE SALMON.

In Two Parts. Part I. The Theory, Principles, and Practice of Fly-Fishing for Salmon; with Lists of good Salmon Flies for every good River in the Empire.—Part II. the Natural History of the Salmon, all its known Habits described, and the best way of artificially Breeding it explained. Usefully illustrated with numerous coloured engravings of Salmon Flies and Salmon Fry. By Ephemera, Author of "A Hand-Book of Angling;" assisted by Andrew Young, of Invershin, Manager of the Duke of Sutherland's Salmon Fisheries. Foolscap 8vo. with coloured Plates, 14*s.* cloth.

EPHEMERA.—A HAND-BOOK OF ANGLING:

Teaching Fly Fishing, Trolling, Bottom Fishing, and Salmon Fishing. With the Natural History of River Fish, and the best Modes of Catching them. By Ephemera. New Edition, enlarged and improved. Foolscap 8vo. with Wood Engravings, 9*s.* cloth.

ERMAN.—TRAVELS IN SIBERIA:

Including Excursions Northwards, down the Obi, to the Polar Circle, and Southwards, to the Chinese Frontier. By Adolph Erman. Translated by W. D. Cooley, Esq. author of "The History of Maritime and Inland Discovery." 2 vols. 8vo. with Map, 31*s.* 6*d.* cloth.

FORBES.—DAHOMEY AND THE DAHOMANS:

Being the Journals of Two Missions to the King of Dahomey, and Residence at his Capital in the Years 1849 and 1850. By Frederick E. Forbes, Commander, R.N., F.R.G.S; Author of "Five Years in China," and "Six Months in the African Blockade." With 10 Plates printed in colours, and Wood Engravings. 2 vols. post 8vo. 21*s.* cloth.

FORESTER AND BIDDULPH.—NORWAY IN 1848 & 1849:

Containing Rambles among the Fjelds and Fjords of the Central and Western Districts; and including Remarks on its Political, Military, Ecclesiastical, and Social Organisation. By Thomas Forester, Esq. With Extracts from the Journals of Lieutenant M. S. Biddulph, Royal Artillery. With a coloured Map, Wood Engravings, and 10 coloured Plates from Drawings made on the Spot. 8vo. 18*s.* cloth.

FOSS.—THE JUDGES OF ENGLAND:

With Sketches of their Lives, and Miscellaneous Notices connected with the Courts at Westminster from the time of the Conquest. By Edward Foss, F.S.A., of the Inner Temple. Vols. I. II. III. and IV. 8vo. 66*s.* cloth.

FRANCIS.—THE HISTORY OF THE BANK OF ENGLAND;

Its Times and Traditions. By John Francis. Third Edition. 2 vols. 8vo. 21*s.* cloth.

FRANCIS.—A HISTORY OF THE ENGLISH RAILWAY;

Its Social Relations and Revelations. By John Francis. 2 vols. 8vo. 24*s.* cloth.

FRANCIS.—CHRONICLES AND CHARACTERS OF THE STOCK EXCHANGE

By John Francis. Second Edition. 8vo. 12*s.* cloth.

THE POETICAL WORKS OF OLIVER GOLDSMITH.

Illustrated by Wood Engravings, from Designs by Members of the Etching Club. Edited by Bolton Corney, Esq. Uniform with *Thomson's Seasons illustrated by the Etching Club.* Square crown 8vo. 21*s.* cloth; or 36*s.* bound in morocco, by Hayday.

GOSSE.—A NATURALIST'S SOJOURN IN JAMAICA.

By P. H. Gosse, Esq. Author of "The Birds of Jamaica," "Popular British Ornithology," etc. With coloured Plates. Post 8vo. 14*s.* cloth.

GRAHAM.—ENGLISH; OR, THE ART OF COMPOSITION.

Explained in a Series of Instructions and Examples. By G. F. Graham. New Edition, revised and improved. Foolscap 8vo. 6*s.* cloth.

THE CRICKET-FIELD;

Or, the Science and History of the Game. Illustrated with Diagrams, and enlivened with Anecdotes. By the Author of "Principles of Scientific Batting," etc. With Two Engravings on Steel; uniform with *Harry Hieover's Hunting Field*. Fcap. 8vo. 5*s*. half-bound.

DALE.—THE DOMESTIC LITURGY AND FAMILY CHAPLAIN: in Two Parts: the First Part being Church Services adapted for Domestic Use, with Prayers for every Day of the Week, selected exclusively from the Book of Common Prayer. Part II. comprising an appropriate Sermon for every Sunday in the Year. By the Rev. Thomas Dale, M.A., Canon-Residentiary of St. Paul's Cathedral. 2d Edition. Post 4to. 21*s*. cloth; or, bound by Hayday, 31*s*. 6*d*. calf lettered; 50*s*. morocco.

Separately { THE FAMILY CHAPLAIN, price 12*s*. cloth.
THE DOMESTIC LITURGY, price 10*s*. 6*d*. cloth.

DAVIS.—CHINA DURING THE WAR AND SINCE THE PEACE. By Sir J. F. Davis, Bart., late Her Majesty's Plenipotentiary in China; Governor and Commander-in-Chief of the Colony of Hong-Kong. 2 vols. post 8vo. with Maps and Wood Engravings. [*In the press.*

DELABECHE.—THE GEOLOGICAL OBSERVER.

By Sir Henry T. Delabeche, F.R.S. Director-General of the Geological Survey of the United Kingdom. In One large Volume, with many Wood Engravings. 8vo. 18*s*. cloth.

DELABECHE.—REPORT ON THE GEOLOGY OF CORNWALL, DEVON AND WEST SOMERSET. By Sir Henry T. De la Beche, F.R.S. etc., Director-General of the Geological Survey of the United Kingdom. Published by Order of the Lords Commissioners of H. M. Treasury. 8vo. with Maps, Woodcuts, and 12 large Plates, 14*s*. cloth.

DE LA RIVE'S WORK ON ELECTRICITY.—A TREATISE ON ELECTRICITY; ITS THEORY AND PRACTICAL APPLICATION. By A. De la Rive, of the Academy of Geneva. Illustrated with numerous Wood Engravings. 2 vols. 8vo. [*In the press.*

DENNISTOUN.—MEMOIRS OF THE DUKES OF URBINO; Illustrating the Arms, Arts, and Literature of Italy, from MCCCCXL. to MDCXXX. By James Dennistoun, of Dennistoun. With numerous Portraits, Plates, Fac-similes, and Engravings on Wood. 3 vols. square crown 8vo. 2*l*. 8*s*. cloth.

DISCIPLINE.

By the Author of "Letters to my Unknown Friends," "Twelve Years Ago," "Some Passages from Modern History," and "Letters on Happiness." Second Edition, enlarged. 18mo. 2*s*. 6*d*. cloth.

EASTLAKE.—MATERIALS FOR A HISTORY OF OIL PAINTING. By Charles Lock Eastlake, Esq. P.R.A. F.R.S. F.S.A. Secretary to the Royal Commission for Promoting the Fine Arts in connexion with the rebuilding of the Houses of Parliament, etc. 8vo. 16*s*. cloth.

*** *Vol. II. On the Italian Practice of Oil Painting, is preparing for publication.*

THE ENGLISHMAN'S GREEK CONCORDANCE OF THE NEW TESTAMENT; being an attempt at a Verbal Connexion between the Greek and the English Texts; including a Concordance to the Proper Names, with Indexes, Greek-English and English-Greek. Second Edition, carefully revised; with a new Index, Greek and English. Royal 8vo. 42*s*.

THE ENGLISHMAN'S HEBREW AND CHALDEE CONCORDANCE OF THE OLD TESTAMENT; being an attempt at a Verbal Connexion between the Original and the English Translations: with Indexes, a List of the Proper Names and their Occurrences, etc. etc. 2 vols. royal 8vo. 3*l*. 13*s*. 6*d*. cloth; large paper, 4*l*. 14*s*. 6*d*.

SIR JOHN HERSCHEL.—OUTLINES OF ASTRONOMY.

By Sir John F. W. Herschel, Bart. etc. New Edition; with Plates and Engravings on Wood. 8vo. 18*s.* cloth.

HINTS ON ETIQUETTE AND THE USAGES OF SOCIETY:

With a Glance at Bad Habits. By Αγωγός. "Manners make the Man." New Edition, revised (with Additions) by a Lady of Rank. Foolscap 8vo. 2*s.* 6*d.* cloth.

HOLLAND.—MEMOIRS OF THE WHIG PARTY DURING MY TIME. By Henry Richard Lord Holland. Edited by his Son, Henry Edward Lord Holland. Vol. I. post 8vo. 9*s.* 6*d.* cloth.

LORD HOLLAND'S FOREIGN REMINISCENCES.—FOREIGN REMINISCENCES. By Henry Richard Lord Holland. Comprising Anecdotes, and an Account of such Persons and Political Intrigues in Foreign Countries as have fallen within his Lordship's Observation. Edited by his Son, Henry Edward Lord Holland. With Fac-simile. Second Edition. Post 8vo. 10*s.* 6*d.*

HOLLAND.—CHAPTERS ON MENTAL PHYSIOLOGY.

By Henry Holland, M.D., F.R.S., etc., Fellow of the Royal College of Physicians; Physician Extraordinary to the Queen; and Physician in Ordinary to His Royal Highness Prince Albert. 8vo.

HOOK (DR. W. F.)—THE LAST DAYS OF OUR LORD'S MINISTRY; A Course of Lectures on the principal Events of Passion Week. By Walter Farquhar Hook, D.D., Vicar of Leeds, Prebendary of Lincoln, and Chaplain in Ordinary to the Queen. New Edition. Foolscap 8vo. 6*s.* cloth.

HOOKER.—KEW GARDENS:

Or a Popular Guide to the Royal Botanic Gardens of Kew. By Sir William Jackson Hooker, K.H. D.C.L. F.R.A. & L.S. etc. etc. Director. New Edition; with numerous Wood-Engravings. 16mo. price 6*d.* sewed.

HOOKER AND ARNOTT.—THE BRITISH FLORA;

Comprising the Phænogamous or Flowering Plants, and the Ferns. The Sixth Edition with Additions and Corrections, and numerous Figures, illustrative of the Umbelliferous Plants, the Composite Plants, the Grasses, and the Ferns. By Sir W. J. Hooker, F.R.A. and L.S. etc., and G. A. Walker Arnott, LL.D. F.L.S. and R.S. Ed.; Regius Professor of Botany in the University of Glasgow. 12mo. with 12 Plates, 14*s.* cloth; or with the Plates coloured, price 21*s.*

HORNE (THE REV. T. H.)—AN INTRODUCTION TO THE CRITICAL STUDY AND KNOWLEDGE OF THE HOLY SCRIPTURES. By the Rev. Thomas Hartwell Horne, B.D. of St. John's College, Cambridge. New Edition, revised and corrected; with Maps and Fac-similes. 5 vols. 8vo. 3*l.* 3*s.* cloth; or 5*l.* bound in calf.

HORNE (THE REV. T. H.)—A COMPENDIOUS INTRODUCTION TO THE STUDY OF THE BIBLE. By the Rev. Thomas Hartwell Horne, B.D. of St. John's College, Cambridge. Being an Analysis of his "Introduction to the Critical Study and Knowledge of the Holy Scriptures." New Edition. 12mo. with Maps and Engravings, 9*s.* boards.

HOWITT.—THE CHILDREN'S YEAR.

By Mary Howitt. With Four Illustrations, engraved by John Absolon, from Original Designs by Anna Mary Howitt. Square 16mo. 5*s.* cloth.

HOWITT.—THE BOY'S COUNTRY BOOK;

Being the real Life of a Country Boy, written by Himself: Exhibiting all the Amusements, *Pleasures*, and Pursuits of Children in the Country. Edited by William Howitt, author of "*The* Rural Life of England," etc. New Edition. Fcap. 8vo. with 40 Woodcuts, 6*s.* cloth.

HOWITT.—VISITS TO REMARKABLE PLACES;

Old Halls, Battle-Fields, and Scenes illustrative of Striking Passages in English History and Poetry. By William Howitt. New Edition; with 40 Woodcuts. Medium 8vo. 21*s.* cloth.

SECOND SERIES, chiefly in the Counties of DURHAM and NORTHUMBERLAND, with a Stroll along the BORDER. With upwards of 40 highly-finished Woodcuts, from Drawings made on the spot. Medium 8vo. 21*s.* cloth.

HOWITT.—THE RURAL LIFE OF ENGLAND.

By William Howitt. New Edition, corrected and revised. With Engravings on Wood by Bewick and Williams; uniform with *Visits to Remarkable Places*. Medium 8vo. 21*s.* cloth.

HUDSON.—THE EXECUTOR'S GUIDE.

By J. C. Hudson, Esq., late of the Legacy Duty Office, London; author of "Plain Directions for Making Wills," and "The Parent's Hand-Book." New Edition. Foolscap 8vo. 5*s.* cloth.

HUDSON.—PLAIN DIRECTIONS FOR MAKING WILLS

In conformity with the Law, and particularly with reference to the Act 7 Wm. IV. and 1 Vict. c. 26. To which is added, a clear Exposition of the Law relating to the Distribution of Personal Estate in the case of Intestacy; with two Forms of Wills, and much useful Information, etc. By J. C. Hudson, Esq. New Edition, corrected. Fcap. 8vo. 2*s.* 6*d.* cloth.

*** *The above Two Works may be had in One Volume, price* 7*s. cloth.*

HUMBOLDT.—ASPECTS OF NATURE,

In Different Lands and Different Climates, with Scientific Elucidations. By Alexander Von Humboldt. Translated, with the Author's sanction and co-operation, and at his express desire, by Mrs. Sabine. 16mo. 6*s.* cloth: or in 2 vols. 3*s.* 6*d.* each cloth; 2*s.* 6*d.* each sewed.

BARON HUMBOLDT'S COSMOS;

Or, a Sketch of a Physical Description of the Universe. Translated, with the Author's sanction and co-operation, under the superintendence of Lieutenant-Colonel Edward Sabine, F.R.S. For. Sec. R.S. New Edition. Vols. I. and II. 16mo. 3*s.* 6*d.* each cloth; 2*s.* 6*d.* each sewed: or in post 8vo. price 12*s.* each. Vol. III. Part I. post 8vo. 6*s.* cloth: or in 16mo. 2*s.* 6*d.* sewed; 3*s.* 6*d.* cloth. Part II. 8vo. post 7*s.* cloth; and in 16mo. 3*s.* sewed, or 4*s.* cloth.

SENTIMENTS AND SIMILES OF SHAKSPEARE.

A Classified Selection of Similes, Definitions, Descriptions, and other remarkable Passages in Shakspeare's Plays and Poems. With an elaborately illuminated Border in the characteristic Style of the Elizabethan Period, and other Embellishments; bound in very massive carved and pierced covers, containing in deep relief a medallion Head and Cypher. The Illuminations and Ornaments designed and executed by Henry Noel Humphreys. Square post 8vo. price One Guinea.

MRS. JAMESON'S LEGENDS OF THE MONASTIC ORDERS

As represented in the Fine Arts. Containing St. Benedict and the early Benedictines in Italy, France, Spain, and Flanders, the Benedictines in England and in Germany; the Reformed Benedictines; early Royal Saints connected with the Benedictine Order; the Augustines; Orders derived from the Augustine Rule; the Mendicant Orders; the Jesuits; and the Order of the Visitation of St. Mary. Forming the SECOND SERIES of *Sacred and Legendary Art*. With Eleven Etchings by the Author, and 84 Woodcuts. Square crown 8vo. 28*s.* cloth.

MRS. JAMESON'S SACRED AND LEGENDARY ART;

Or, Legends of the Saints and Martyrs. FIRST SERIES. Containing, Legends of the Angels and Archangels; the Evangelists and Apostles; the Greek and Latin Fathers; the Magdalene; the Patron Saints; the Virgin Patronesses; the Martyrs; the Bishops; the Hermits; and the Warrior-Saints of Christendom. Second Edition, printed in One Volume for the convenience of Students and Travellers; with numerous Woodcuts, and Sixteen Etchings by the Author. Square crown 8vo. 28*s.* cloth.

MRS. JAMESON'S LEGENDS OF THE MADONNA,

As represented in the Fine Arts. Forming the THIRD *and concluding* SERIES of *Sacred and Legendary Art*. By Mrs. Jameson, Author of "Characteristics of Women," etc. With Etchings by the Author, and Engravings on Wood. Square crown 8vo.

[*In the press.*

JEFFREY (LORD).—CONTRIBUTIONS TO THE EDINBURGH

REVIEW. By Francis Jeffrey, late One of the Judges in the Court of Session in Scotland. Second Edition. 3 vols. 8vo. 42*s.* cloth.

BISHOP JEREMY TAYLOR'S ENTIRE WORKS:

With the Life by Bishop Heber. Revised and corrected by the Rev. Charles Page Eden, Fellow of Oriel College, Oxford. In Ten Volumes. Vols. II. to IX. 8vo. price Half-a-Guinea each.

*** *The* First *Volume (but the* last *in order of* publication), *will contain Bishop Heber's Life of Jeremy Taylor, extended by the Editor.*

[*Vol. X. is in the press.*

READINGS FOR EVERY DAY IN LENT.

Compiled from the Writings of Bishop Jeremy Taylor. By the Author of "Amy Herbert," "The Child's First History of Rome," etc. Fcap. 8vo. 5*s.* cloth.

JOHNSTON.—A NEW DICTIONARY OF GEOGRAPHY,

Descriptive, Physical, Statistical, and Historical: Forming a complete General Gazetteer of the World. By Alexander Keith Johnston, F.R.S.E. F.R.G.S. F.G.S.; Geographer at Edinburgh in Ordinary to Her Majesty; Author of "The Physical Atlas of Natural Phenomena." In One Volume of 1,440 pages, comprising nearly Fifty Thousand Names of Places. 8vo. 36*s.* cloth.; or strongly half-bound in russia, with flexible back, price 41*s.*

KEMBLE.—THE SAXONS IN ENGLAND:

A History of the English Commonwealth till the period of the Norman Conquest. By John Mitchell Kemble, M.A., F.C.P.S., etc. 2 vols. 8vo. 28*s.* cloth.

KIRBY AND SPENCE.—AN INTRODUCTION TO ENTOMOLOGY;

or, Elements of the Natural History of Insects: comprising an account of noxious and useful Insects, of their Metamorphoses, Food, Stratagems, Habitations, Societies, Motions, Noises, Hybernation, Instinct, etc. By W. Kirby, M.A. F.R.S. & L.S. Rector of Barham; and W. Spence, Esq., F.R.S. & L.S. New Edition, enlarged. 2 vols. 8vo. 31*s.* 6*d.* cloth.

L. E. L.—THE POETICAL WORKS OF LETITIA ELIZABETH

LANDON; Comprising the IMPROVISATRICE, the VENETIAN BRACELET, the GOLDEN VIOLET, the TROUBADOUR, and other Poetical Remains. New Edition, uniform with Moore's *Songs, Ballads, and Sacred Songs*; with 2 Vignettes by Richard Doyle. 2 vols. 16mo. 10*s.* cloth; morocco, 21*s.*

LAING.—NOTES ON THE POLITICAL AND SOCIAL STATE

OF DENMARK AND THE DUCHIES OF HOLSTEIN AND SLESWICK. By Samuel Laing, Esq., Author of "Journal of a Residence in Norway," "A Tour in Sweden," "Notes of a Traveller," etc.

[*In the press.*

LAING.—OBSERVATIONS ON THE SOCIAL AND POLI-

TICAL STATE OF THE EUROPEAN PEOPLE IN 1848 AND 1849: being the Second Series of "Notes of a Traveller." By Samuel Laing, Esq., author of "A Journal of a Residence in Norway," the Translation of "The Heimskringla," and of "Notes of a Traveller on the Social and Political State of France, Prussia," etc. 8vo. 14*s.* cloth.

LARDNER.—THE GREAT EXHIBITION AND LONDON IN

1851. Reviewed by Dr. Lardner, Michel Chevalier, John Lemoinne, and Hector Berlioz. 8vo.

[*Nearly ready.*

LARDNER'S CABINET CYCLOPÆDIA.

The Cabinet Cyclopædia of History, Biography, Literature, the Arts and Sciences, Natural History, and Manufactures. Comprising a Series of Original Works by Sir John Herschel, Sir James Mackintosh, Robert Southey, Sir David Brewster, Thomas Keightley, John Forster, Sir Walter Scott, Thomas Moore, Bishop Thirlwall, the Rev. G. R. Gleig, J. C. L. Sismondi, John Phillips, F.R.S., G.S., and other eminent Writers. 132 vols. fcap. 8vo. with Vignette Titles, price NINETEEN GUINEAS, cloth.—The works separately, in Sets or Series, price THREE SHILLINGS and SIXPENCE each Volume.

The complete Series comprises the following Works:—

1. Bell's History of Russia . 3 vols. 10*s.* 6*d.*
2. Bell's Lives of British Poets, 2 vols. 7*s.*
3. Brewster's Optics . . 1 vol. 3*s.* 6*d.*
4. Cooley's Maritime and Inland Discovery . . 3 vols. 10*s.* 6*d.*
5. Crowe's History of France, 3 vols. 10*s.* 6*d.*
6. De Morgan on Probabilities, 1 vol. 3*s.* 6*d.*
7. De Sismondi's History of the Italian Republics . 1 vol. 3*s.* 6*d.*
8. De Sismondi's Fall of the Roman Empire . . 2 vols. 7*s.*
9. Donovan's Chemistry . 1 vol. 3*s.* 6*d.*
10. Donovan's Domestic Economy . . . . 2 vols. 7*s.*
11. Dunham's Spain and Portugal . . . . 5 vols. 17*s.* 6*d.*
12. Dunham's History of Denmark, Sweden, and Norway . . . . 3 vols. 10*s.* 6*d.*
13. Dunham's History of Poland . . . . 1 vol. 3*s.* 6*d.*
14. Dunham's Germanic Empire . . . . 3 vols. 10*s.* 6*d.*
15. Dunham's Europe during the Middle Ages . . 4 vols. 14*s.*
16. Dunham's British Dramatists . . . . 2 vols. 7*s.*
17. Dunham's Lives of Early Writers of Great Britain, 1 vol. 3*s.* 6*d.*
18. Fergus's History of the United States . . 2 vols. 7*s.*
19. Fosbroke's Greek and Roman Antiquities . . 2 vols. 7*s.*
20. Forster's Lives of the Statesmen of the Commonwealth . . . 5 vols. 17*s.* 6*d.*
21. Gleig's Lives of Military Commanders . . 3 vols. 10*s.* 6*d.*
22. Grattan's History of the Netherlands . . . 1 vol. 3*s.* 6*d.*
23. Henslow's Botany . . 1 vol. 3*s.* 6*d.*
24. Herschel's Astronomy . 1 vol. 3*s.* 6*d.*
25. Herschel's Discourse on Natural Philosophy . 1 vol. 3*s.* 6*d.*
26. History of Rome . . 2 vols. 7*s.*
27. History of Switzerland . 1 vol. 3*s.* 6*d.*
28. Holland's Treatise on the Manufactures in Metal, 3 vols. 10*s.* 6*d.*
29. James's Lives of Foreign Statesmen . . . 5 vols. 17*s.* 6*d.*
30. Kater and Lardner's Mechanics . . . 1 vol. 3*s.* 6*d.*
31. Keightley's Outlines of History . . . . 1 vol. 3*s.* 6*d.*
32. Lardner's Arithmetic . 1 vol. 3*s.* 6*d.*
33. Lardner's Geometry . 1 vol. 3*s.* 6*d.*
34. Lardner on Heat . . 1 vol. 3*s.* 6*d.*
35. Lardner's Hydrostatics and Pneumatics . . . 1 vol. 3*s.* 6*d.*
36. Lardner and Walker's Electricity and Magnetism, 2 vols. 7*s.*
37. Mackintosh, Forster, and Courtenay's Lives of British Statesmen . . 7 vols. 24*s.* 6*d.*
38. Mackintosh, Wallace, and Bell's History of England . . . . 10 vols. 35*s.*
39. Montgomery and Shelley's Eminent Italian, Spanish, and Portuguese Authors, 3 vols. 10*s.* 6*d.*
40. Moore's History of Ireland, 4 vols. 10*s.* 6*d.*
41. Nicolas's Chronology of History. . . . . 1 vol. 3*s.* 6*d.*
42. Phillips' Treatise on Geology . . . . 2 vols. 3*s.* 6*d.*
43. Powell's History of Natural Philosophy . . . 1 vol. 3*s.* 6*d.*
44. Porter's Treatise on the Manufacture of Silk . 1 vol. 3*s.* 6*d.*
45. Porter's Manufacture of Porcelain and Glass . 1 vol. 3*s.* 6*d.*
46. Roscoe's British Lawyers, 1 vol. 3*s.* 6*d.*
47. Scott's History of Scotland . . . . 2 vols. 7*s.*
48. Shelley's Lives of Eminent French Authors . . 2 vols. 7*s.*
49. Shuckard and Swainson's Insects . . . . 1 vol. 3*s.* 6*d.*
50. Southey's Lives of British Admirals . . . 5 vols. 17*s.* 6*d.*
51. Stebbing's Church History, 2 vols. 7*s.*
52. Stebbing's History of the Reformation . . 2 vols. 7*s.*
53. Swainson's Discourse on Natural History . . 1 vol. 3*s.* 6*d.*
54. Swainson's Natural History and Classification of Animals . . . 1 vol. 3*s.* 6*d.*
55. Swainson's Habits and Instincts of Animals . 1 vol. 3*s.* 6*d.*
56. Swainson's Birds . . 2 vols. 7*s.*
57. Swainson's Fish, Reptiles, etc. . . . . 2 vols. 7*s.*
58. Swainson's Quadrupeds . 1 vol. 3*s.* 6*d.*
59. Swainson's Shells and Shell-fish . . . 1 vol. 3*s.* 6*d.*
60. Swainson's Animalsin Menageries . . . 1 vol. 3*s.* 6*d.*
61. Swainson's Taxidermy and Bibliography . . 1 vol. 3*s.* 6*d.*
62. Thirlwall's History of Greece . . . . 8 vols. 28*s.*

LATHAM.—ON DISEASES OF THE HEART.

Lectures on Subjects connected with Clinical Medicine; comprising Diseases of the Heart. By P. M. Latham, M.D. Physician Extraordinary to the Queen; and late Physician to St. Bartholomew's Hospital. New Edition. 2 vols. 12mo. 16*s.* cloth.

LEE.—ELEMENTS OF NATURAL HISTORY; OR, FIRST

PRINCIPLES OF ZOOLOGY. For the Use of Schools and Young Persons: comprising the Principles of Classification, interspersed with amusing and instructive Accounts of the most remarkable Animals. By Mrs. R. Lee. New Edition, revised and enlarged; with numerous additional Woodcuts. Foolscap 8vo. 7*s.* 6*d.* cloth.

LETTERS ON HAPPINESS, ADDRESSED TO A FRIEND.

By the Authoress of "Letters to My Unknown Friends," "Twelve Years Ago, a Tale," "Some Passages from Modern History," and "Discipline." Foolscap 8vo. 6*s.* cloth.

LETTERS TO MY UNKNOWN FRIENDS.

By a Lady. Third Edition. Foolscap 8vo. 6*s.* cloth.

LINDLEY.—AN INTRODUCTION TO BOTANY.

By Prof. J. Lindley, Ph.D., F.R.S. L.S. etc. New Edition, with Corrections and numerous Additions. 2 vols. 8vo. with Six Plates and numerous Woodcuts, 24*s.* cloth.

LINDSAY.—OUR NAVIGATION AND MERCANTILE MARINE

LAWS considered with a View to their general Revision and Consolidation; also, an Inquiry into the principal Maritime Institutions. By W. S. Lindsay. 8vo. 7*s.* 6*d.* cloth.

LINWOOD (W.)—ANTHOLOGIA OXONIENSIS;

Sive, Florilegium e lusibus poeticis diversorum Oxoniensium Græcis et Latinis decerptum. Curante Gulielmo Linwood, M.A. Ædis Christi Alummo. 8vo. 14*s.* cloth.

LITTON.—THE CHURCH OF CHRIST,

In its Idea, Attributes, and Ministry: with a particular reference to the Controversy on the Subject between Romanists and Protestants. By the Rev. Edward Arthur Litton, M.A., Perpetual Curate of Stockton Heath; and Vice-Principal of St. Edmund Hall, Oxford. 8vo. 16*s.* cloth.

LORIMER.—LETTERS TO A YOUNG MASTER MARINER

On some Subjects connected with his Calling. By the late Charles Lorimer. A New Edition. Foolscap 8vo. 5*s.* 6*d.* cloth.

LOUDON.—THE AMATEUR GARDENER'S CALENDAR:

Being a Monthly Guide, as to what should be avoided as well as what should be done in a Garden in each Month: with plain Rules *how to do* what is requisite; Directions for laying out and planting Kitchen and Flower Gardens, Pleasure Grounds, and Shrubberies; and a short account, in each Month, of the Quadrupeds, Birds, and Insects, then most injurious to Gardens. By Mrs. Loudon. 16mo. with numerous Wood Engravings, 7*s.* 6*d.* cloth.

LOUDON—THE LADY'S COUNTRY COMPANION;

Or, How to Enjoy a Country Life Rationally. By Mrs. Loudon, author of "Gardening for Ladies," etc. New Edition. Foolscap 8vo., with Plate and Woodcuts, 7*s.* 6*d.* cloth.

LOUDON'S SELF-INSTRUCTION FOR YOUNG GARDENERS,

Foresters, Bailiffs, Land Stewards, and Farmers; in Arithmetic, Book-keeping, Geometry, Mensuration, Practical Trigonometry, Mechanics, Land-Surveying, Levelling, Planning and Mapping, Architectural Drawing, and Isometrical Projection and Perspective; with Examples shewing their applications to Horticultural and Agricultural Purposes. *With a Portrait of Mr. Loudon, and a Memoir by Mrs. Loudon.* 8vo. with Wood Engravings, 7*s.* 6*d.* cloth.

LOUDON'S ENCYCLOPÆDIA OF TREES AND SHRUBS:

Being the *Arboretum et Fruticetum Britannicum* abridged: containing the Hardy Trees and Shrubs of Great Britain, Native and Foreign, scientifically and popularly described: with their Propagation, Culture, and Uses in the Arts. With about 2,000 Engravings on Wood. 8vo. 2*l.* 10*s.* cloth.

LOUDON'S ENCYCLOPÆDIA OF GARDENING:

Comprising the Theory and Practice of Horticulture, Floriculture, Arboriculture, and Landscape Gardening: including all the latest Improvements; a General History of Gardening in all Countries; and a Statistical View of its Present State; with Suggestions for its Future Progress in the British Isles. By J. C. Loudon, F.L.S. H.S., etc. Illustrated with many hundred Engravings on Wood by Branston. New Edition, corrected and improved by Mrs. Loudon. 8vo. 50*s.* cloth.

LOUDON'S ENCYCLOPÆDIA OF AGRICULTURE:

Comprising the Theory and Practice of the Valuation, Transfer, Laying-out, Improvement, and Management of Landed Property, and of the cultivation and economy of the Animal and Vegetable Productions of Agriculture, including all the latest improvements. Fifth Edition; with upwards of 1,100 Engravings on Wood by Branston. 8vo. 2*l.* 10*s.* cloth.

LOUDON'S ENCYCLOPÆDIA OF PLANTS:

Including all the Plants which are now found in, or have been introduced into, Great Britain giving their Natural History, accompanied by such Descriptions, Engraved Figures, and Elementary Details, as may enable a beginner, who is a mere English reader, to discover the name of every Plant which he may find in flower, and acquire all the information respecting it which is useful and interesting. By J. C. Loudon, F.L.S., etc. The Specific Characters by an Eminent Botanist; the Drawings by J. D. C. Sowerby. New Edition, corrected throughout and brought down to the year 1852, by Mrs. Loudon. [*In the press.*

LOUDON'S ENCYCLOPÆDIA OF COTTAGE, FARM, AND VILLA ARCHITECTURE and FURNITURE.

Containing Designs for Cottages, Villas, Farm Houses, Farmeries, Country Inns, Public Houses, Parochial Schools, etc.; with the requisite Fittings-up, Fixtures, and Furniture, and appropriate Offices, Gardens, and Garden Scenery: each Design accompanied by Analytical and Critical Remarks. By J. C. Loudon, F.L.S. etc. New Edition, Edited by Mrs. Loudon. With more than 2,000 Engravings on Wood. 8vo. 63*s.* cloth.

LOUDON'S HORTUS BRITANNICUS;

Or, Catalogue of all the Plants indigenous to, cultivated in, or introduced into Britain. An entirely New Edition corrected throughout: with a Supplement, including all the New Plants down to March, 1850; and a New General Index to the whole Work. Edited by Mrs. Loudon; assisted by W. H. Baxter and David Wooster. 8vo. 31*s.* 6*d.* cloth.

SUPPLEMENT.

Including all the Plants introduced into Britain, all the newly discovered British Species, and all the kinds originated in British Gardens, up to March 1850. With a new General Index to the whole work. By W. H. Baxter and D. Wooster, under the direction of Mrs. Loudon. 8vo. 14*s.* cloth.

LOW.—ON LANDED PROPERTY, AND THE ECONOMY OF ESTATES:

Comprehending the Relations between Landlord and Tenant, and the Principles and Forms of Leases; of Farm Buildings, Enclosures, Drains, Embankments, Roads, and other Rural Works, Minerals, and Woods. By David Low, Esq. F.R.S.E. etc., author of "Elements of Practical Agriculture," etc. 8vo. with numerous Wood Engravings, 21*s.* cloth.

LOW.—ELEMENTS OF PRACTICAL AGRICULTURE:

Comprehending the Cultivation of Plants, the Husbandry of the Domestic Animals, and the Economy of the Farm. By David Low, Esq. F.R.S.E., Professor of Agriculture in the University of Edinburgh. New Edition; with an entirely new set of above 200 Woodcuts. 8vo. 21*s.* cloth.

MACAULAY.—THE HISTORY OF ENGLAND,

From the Accession of James II. By Thomas Babington Macaulay. New Edition. Vols. I. and II. 8vo. 32*s.* cloth.

MACAULAY.—CRITICAL AND HISTORICAL ESSAYS CONTRIBUTED TO THE EDINBURGH REVIEW. By Thomas Babington Macaulay. New Edition, complete in One Volume; with Portrait by E. U. Eddis, engraved in line by G. W. Greatbach, and Vignette. Square crown 8vo. 21s. cloth; 30s. calf extra, by Hayday. —Or (Sixth Edition) in 3 vols. 8vo. 36s. cloth.

MACAULAY.—LAYS OF ANCIENT ROME:
With IVRY and THE ARMADA. By Thomas Babington Macaulay. New Edition. 16mo. 4s. 6d. cloth; morocco, 10s. 6d. (*bound by Hayday*).

MR. MACAULAY'S LAYS OF ANCIENT ROME.
With numerous Illustrations, Original and from the Antique, drawn on Wood by George Scharf, jun. and engraved by Samuel Williams. New Edition. Fcap. 4to. 21s. boards; morocco, 42s. (*bound by Hayday*).

MACDONALD.—VILLA VEROCCHIO; OR, THE YOUTH OF LEONARDO DA VINCI: a Tale. By the late Diana Louisa Macdonald. Fcap. 8vo. 6s. cloth.

MACKAY.—THE SCENERY AND POETRY OF THE ENGLISH LAKES: A Summer Ramble. By Charles Mackay, Esq. LL.D., Author of "The Salamandrine," etc. With beautiful Wood Engravings from Original Sketches. A New and cheaper Edition, with additional Illustrations. Post 8vo. 7s. 6d. cloth.

MACKINTOSH'S (SIR JAMES) MISCELLANEOUS WORKS:
Including his Contributions to The EDINBURGH REVIEW. A New Edition, complete in One Volume; with Portrait engraved in line by W. Greatbach, and Vignette. Square crown 8vo. 21s. cloth; or 30s. calf extra by Hayday.

M'CULLOCH.—A DICTIONARY, GEOGRAPHICAL, STATISTICAL, AND HISTORICAL, of the various Countries, Places, and Principal Natural Objects in the World. By J. R. M'Culloch, Esq. Illustrated with Six large Maps. New Edition, corrected and in part re-written; with a Supplement. 2 thick vols. 8vo. 63s. cloth.

M'CULLOCH.—A DICTIONARY, PRACTICAL, THEORETICAL, AND HISTORICAL, OF COMMERCE, AND COMMERCIAL NAVIGATION. Illustrated with Maps and Plans. By J. R. M'Culloch, Esq. A New Edition (1852), corrected, enlarged, and improved: including a New Supplement. 8vo. 50s. cloth; or 55s. strongly half-bound in russia.

*** THE NEW SUPPLEMENT *may be had separately, price 4s. 6d. sewed.*

M'CULLOCH.—AN ACCOUNT, DESCRIPTIVE, AND STATISTICAL, of the BRITISH EMPIRE; exhibiting its Extent, Physical Capacities, Population, Industry, and Civil and Religious Institutions. By J. R. M'Culloch, Esq. 3d Edition, corrected, enlarged, and greatly improved. 2 thick vols. 8vo. 42s. cloth.

M'CULLOCH.—A TREATISE ON THE PRINCIPLES AND PRACTICAL INFLUENCE OF TAXATION AND THE FUNDING SYSTEM. By J. R. M'Culloch, Esq. Second Edition (1852), corrected, enlarged, and improved. 8vo. 16s. cloth.

M'CULLOCH.—A TREATISE ON THE CIRCUMSTANCES WHICH DETERMINE THE RATE OF WAGES AND THE CONDITION OF THE LABOURING CLASSES. By J. R. M'Culloch, Esq. Fcap. 8vo. 3s. 6d. cloth.

MAITLAND.—THE CHURCH IN THE CATACOMBS:
A Description of the Primitive Church of Rome, illustrated by its Sepulchral Remains. *By Charles* Maitland. New Edition, revised; with numerous Woodcuts. 8vo. 14s. cloth.

MARCET.—CONVERSATIONS ON CHEMISTRY:
In which the Elements of that Science are familiarly Explained and Illustrated by Experiments. By Jane Marcet. New Edition, corrected. 2 vols. foolscap 8vo. 14*s.* cloth.

MARCET.—CONVERSATIONS ON POLITICAL ECONOMY:
In which the Elements of that Science are familiarly explained. By Jane Marcet. New Edition, revised and enlarged. Foolscap 8vo. 7*s.* 6*d.* cloth.

MARCET.—CONVERSATIONS ON NATURAL PHILOSOPHY.
In which the Elements of that Science are familiarly explained, and adapted to the comprehension of Young Persons. By Jane Marcet. New Edition, enlarged and corrected. Fcap. 8vo. with 23 Plates, 10*s.* 6*d.* cloth.

MARCET.—CONVERSATIONS ON VEGETABLE PHYSIOLOGY; comprehending the Elements of Botany, with their application to Agriculture. By Jane Marcet. New Edition. Foolscap 8vo. with Four Plates, 9*s.* cloth.

MARCET.—CONVERSATIONS ON LAND AND WATER.
By Jane Marcet. New Edition revised and corrected. Foolscap 8vo. with coloured Map shewing the comparative Altitude of Mountains, 5*s.* 6*d.* cloth.

MARRYAT (CAPT.)—MASTERMAN READY;
Or, the Wreck of the Pacific. Written for Young People. By Captain Marryat, C.B. author of "Peter Simple," etc. A New Edition, complete in Two Volumes; with numerous Wood Engravings. 2 vols. fcap. 8vo. 12*s.* cloth.

MARRYAT.—THE PRIVATEER'S-MAN ONE HUNDRED YEARS AGO. By Captain F. Marryat, C.B., author of "Peter Simple," "Masterman Ready," etc. 2 vols. fcap. 8vo. 12*s.* cloth.

MARRYAT.—THE MISSION;
Or, Scenes in Africa. Written for Young People. By Captain Marryat, C.B., author of "Peter Simple," "Masterman Ready," etc. 2 vols. fcap. 8vo. 12*s.* cloth.

MARRYAT.—THE SETTLERS IN CANADA.
Written for Young People. By Captain Marryat, C.B., author of "Peter Simple," "Masterman Ready," etc. New Edition. Fcap. 8vo. with two Illustrations, 7*s.* 6*d.* cloth.

MAUNDER.—THE SCIENTIFIC AND LITERARY TREASURY: A New and Popular Encyclopædia of Science and the Belles Lettres; including all Branches of Science, and *every* Subject connected with Literature and Art. The whole written in a familiar style, adapted to the comprehension of all persons desirous of acquiring information on the subjects comprised in the work, and also adapted for a Manual of convenient Reference to the more instructed. By Samuel Maunder. New Edition. Fcap. 8vo. 10*s.* cloth; bound in roan, 12*s.*

MAUNDER'S TREASURY OF HISTORY;
Comprising a General Introductory Outline of Universal History, Ancient and Modern, and a Series of separate Histories of every principal Nation that exists; developing their Rise, Progress, and Present Condition, the Moral and Social Character of their respective Inhabitants, their Religion, Manners, and Customs, etc. etc. New Edition. Foolscap 8vo. 10*s.* cloth; bound in roan, 12*s.*

MAUNDER'S TREASURY OF NATURAL HISTORY;
Or, a Popular Dictionary of Animated Nature: in which the Zoological Characteristics that distinguish the different Classes, Genera, and Species are combined with a variety of interesting Information illustrative of the Habits, Instincts, and General Economy of the Animal Kingdom. To which are added, a Syllabus of Practical Taxidermy, and a Glossarial Appendix. Embellished with 900 Engravings on Wood, from Drawings made expressly for this Work. New Edition. Fcap. 8vo. 10*s.* cloth; bound in roan, 12*s.*

MAUNDER'S TREASURY OF KNOWLEDGE,

And LIBRARY of REFERENCE: Comprising an English Grammar; Tables of English Verbal Distinctions; Proverbs, Terms, and Phrases, in Latin, Spanish, French, and Italian, translated; new and enlarged English Dictionary; Directions for Pronunciation; new Universal Gazetteer; Tables of Population and Statistics; List of Cities, Boroughs, and Market Towns in the United Kingdom; Regulations of the General Post-Office; List of Foreign Animal, Vegetable, and Mineral Productions; compendious Classical Dictionary; Scripture Proper Names accented, and Christian Names of Men and Women: with Latin Maxims translated; List of Abbreviations; Chronology and History; compendious Law Dictionary; Abstract of Tax Acts; Interest and other Tables; Forms of Epistolary Address; Tables of Precedency; Synopsis of the British Peerage; and Tables of Number, Money, Weights and Measures. New Edition, revised throughout and greatly enlarged. Foolscap 8vo. 10*s.* cloth; bound in roan, 12*s.*

MAUNDER'S BIOGRAPHICAL TREASURY:

Consisting of Memoirs, Sketches, and brief Notices of above 12,000 Eminent Persons of all Ages and Nations, from the Earliest Period of History; forming a new and complete Dictionary of Universal Biography. A New and carefully revised Edition; corrected throughout, and extended by the introduction of numerous additional Lives. Foolscap 8vo. 10*s.* cloth; bound in roan, 12*s.*

MERIVALE.—A HISTORY OF THE ROMANS UNDER THE EMPIRE.

By the Rev. Charles Merivale, late Fellow and Tutor of St. John's College, Cambridge. Vols. I. and II. 8vo. 28*s.* cloth. Also, Vol. III. completing the History to the Establishment of the Monarchy by Augustus. 8vo. 14*s.* cloth.

JAMES MONTGOMERY'S POETICAL WORKS.

With some additional Poems, and the Author's Autobiographical Prefaces. A New Edition, complete in One Volume; with Portrait and Vignette. Square crown 8vo. 10*s.* 6*d.* cloth; morocco, 21*s.*—Or in 4 vols. foolscap 8vo. with Portrait, and Seven other Plates, 20*s.* cloth; bound in morocco, 1*l.* 16*s.*

MOORE.—HEALTH, DISEASE, AND REMEDY,

Familiarly and Practically considered in a few of their Relations to the Blood. By George Moore, M.D., Member of the Royal College of Physicians, etc., author of "The Power of the Soul over the Body," etc. Post 8vo. 7*s.* 6*d.* cloth.

MOORE.—THE POWER OF THE SOUL OVER THE BODY.

Considered in relation to Health and Morals. By George Moore, M.D. Member of the Royal College of Physicians, etc. New Edition. Post 8vo. 7*s.* 6*d.* cloth.

MOORE.—THE USE OF THE BODY IN RELATION TO THE MIND.

By George Moore, M.D. Member of the Royal College of Physicians, etc. New Edition. Post 8vo. 9*s.* cloth.

MOORE.—MAN AND HIS MOTIVES.

By George Moore, M.D. Member of the Royal College of Physicians, etc. New Edition. Post 8vo. 8*s.* cloth.

MOORE'S POETICAL WORKS:

Containing the Author's recent Introduction and Notes. Complete in One Volume, uniform with Lord Byron's and Southey's Poems. With Portrait by George Richmond, engraved in line, and View of Sloperton Cottage. Medium 8vo. 1*l.* 1*s.* cloth; or 42*s.* bound in morocco, by Hayday.—Or in 10 vols. foolscap 8vo. with Portrait, and 19 Plates, 2*l.* 10*s.* cloth; morocco, 4*l.* 10*s.*

THOMAS MOORE'S SONGS, BALLADS, AND SACRED SONGS.

First collected Edition, uniform with the smaller Edition of Mr. Macaulay's *Lays of Ancient Rome*; with Vignette by Richard Doyle. 16mo. 5*s.* cloth; or 12*s.* 6*d.* bound in smooth morocco, by Hayday.

MOORE'S IRISH MELODIES.

New Edition, uniform in size with the smaller Edition of Mr. Macaulay's "Lays of Ancient Rome." With the Autobiographical Preface from the Collective Edition of Mr. Moore's Poetical Works, and a Vignette by D. Maclise, R.A. 16mo. 5*s.* cloth; 12*s.* 6*d.* bound in smooth morocco, by Hayday.—Or in foolscap 8vo. with Vignette by Corbould, 10*s.* cloth; bound in morocco, 13*s.* 6*d.*

MOORE'S IRISH MELODIES.

Illustrated by D. Maclise, R.A. New and cheaper Edition, with 161 Designs, and the whole of the Letter-press engraved on Steel, by F. P. Becker. Super royal 8vo. 31*s.* 6*d.* cloth; bound in morocco, by Hayday, 2*l.* 12*s.* 6*d.*

*** *The Original Edition, in imperial* 8vo. 63*s. boards; morocco, by Hayday,* 4*l.* 14*s.* 6*d.*; *Proofs,* 6*l.* 6*s. boards,—may still be had.*

MOORE'S LALLA ROOKH: AN ORIENTAL ROMANCE.

New Edition, uniform in size with the smaller Edition of Mr. Macaulay's *Lays of Ancient Rome.* With the Autobiographical Preface from the Collective Edition of Mr. Moore's Poetical Works, and a Vignette by D. Maclise, R.A. 16mo. 5*s.* cloth; 12*s.* 6*d.* bound in smooth morocco, by Hayday.—Or in foolscap 8vo. with 4 Plates by Westall, 10*s.* 6*d.* cloth; or 14*s.* bound in morocco.

MOORE'S LALLA ROOKH: AN ORIENTAL ROMANCE.

With 13 highly finished Steel Plates, from Designs by Corbould, Meadows, and Stephanoff, engraved under the superintendence of the late Charles Heath. New Edition, uniform in size with *Thomson's Seasons* and *Goldsmith's Poems*, illustrated by the *Etching Club.* Square crown 8vo. 15*s.* cloth; morocco, 28*s.*

*** *A few copies of the Original Edition, in royal* 8vo. *price One Guinea,—still remain.*

MOSELEY.—ILLUSTRATIONS OF PRACTICAL MECHANICS.

By the Rev. H. Moseley, M.A., Professor of Natural Philosophy and Astronomy in King's College, London; Author of "The Mechanical Principles of Engineering and Architecture." New Edition. Fcap. 8vo. with Woodcuts, 8*s.* cloth.

MOSELEY.—THE MECHANICAL PRINCIPLES OF ENGINEERING AND ARCHITECTURE. By the Rev. H. Moseley, M.A. F.R.S., Professor of Natural Philosophy and Astronomy in King's College, London; and author of "Illustrations of Practical Mechanics. 8vo. with Woodcuts and Diagrams, 1*l.* 4*s.* cloth.

MOSHEIM'S ECCLESIASTICAL HISTORY,

Ancient and Modern. Translated, with copious Notes, by James Murdock, D.D. New Edition, revised, and continued, by the Rev. Henry Soames, M.A. 4 vols. 8vo. 48*s.* cloth.

MURE.—A CRITICAL HISTORY OF THE LANGUAGE AND LITERATURE OF ANCIENT GREECE. By William Mure, M.P., of Caldwell. 3 vols. 8vo. 36*s.* cloth.

MURRAY.—AN ENCYCLOPÆDIA OF GEOGRAPHY:

Comprising a complete Description of the Earth: exhibiting its Relation to the Heavenly Bodies, its Physical Structure, the Natural History of each Country, and the Industry, Commerce, Political Institutions, and Civil and Social State of all Nations. By Hugh Murray, F.R.S.E. Second Edition; with 82 Maps, and upwards of 1,000 other Wood Engravings. 8vo. 3*l.* cloth.

NEALE.—THE RICHES THAT BRING NO SORROW.

By the Rev. Erskine Neale, M.A., Rector of Kirton, Suffolk; Author of "The Closing Scene." Foolscap 8vo. 6*s.* cloth.

THE EARTHLY RESTING-PLACES OF THE JUST.

By the Rev. Erskine Neale, M.A., Rector of Kirton, Suffolk; author of "The Closing Scene." With Wood Engravings. Fcap. 8vo. 7*s.* cloth.

NEALE.—THE CLOSING SCENE;

Or, Christianity and Infidelity contrasted in the Last Hours of Remarkable Persons. By the Rev. Erskine Neale, M.A., Rector of Kirton, Suffolk. New Editions of the First and Second Series. 2 vols. fcap. 8vo. 12s. cloth; or separately 6s. each.

NEWMAN.—DISCOURSES ADDRESSED TO MIXED CONGREGATIONS.

By John Henry Newman, Priest of the Oratory of St. Philip Neri. Second Edition. 8vo. 12s. cloth.

LIEUTENANT OSBORN'S ARCTIC JOURNAL.

STRAY LEAVES FROM AN ARCTIC JOURNAL. By Lieut. Sherard Osborn, R.N., Commanding H.M.S.V. Pioneer, in the late Expedition, 1850–51, under Capt. Austin, to rescue Sir John Franklin. With Map and Four coloured Plates. Post 8vo.

[*Nearly ready.*

OWEN JONES.—WINGED THOUGHTS.

A Series of Poems. By Mary Anne Bacon. With Illustrations of Birds, designed by E. L. Bateman, and executed in illuminated printing by Owen Jones. Uniform with *Flowers and their Kindred Thoughts*, and *Fruits from the Garden and the Field*. Imperial 8vo. 31s. 6d. elegantly bound in calf.

OWEN JONES.—FLOWERS AND THEIR KINDRED THOUGHTS:

A Series of Stanzas. By Mary Anne Bacon, Author of "Winged Thoughts." With beautiful Illustrations of Flowers, designed and printed in Colours by Owen Jones. Imperial 8vo. 31s. 6d. elegantly bound in calf.

OWEN JONES.—FRUITS FROM THE GARDEN AND THE FIELD.

A Series of Stanzas. By Mary Anne Bacon, Author of "Winged Thoughts." With beautiful Illustrations of Fruit, designed and printed in Colours by Owen Jones. Imperial 8vo. 31s. 6d. elegantly bound in calf.

OWEN.—LECTURES ON THE COMPARATIVE ANATOMY AND PHYSIOLOGY OF THE INVERTEBRATE ANIMALS,

delivered at the Royal College of Surgeons in 1843. By Richard Owen, F.R.S. Hunterian Professor to the College. From Notes taken by William White Cooper, M.R.C.S. and revised by Professor Owen. With Glossary and Index. New Edition, corrected. 8vo. with Woodcuts.

[*Nearly ready.*

OWEN.—LECTURES ON THE COMPARATIVE ANATOMY AND PHYSIOLOGY of the VERTEBRATE ANIMALS,

delivered at the Royal College of Surgeons in 1844 and 1846. By Richard Owen, F.R.S. Hunterian Professor to the College. In 2 vols. The First Volume; with numerous Woodcuts. 8vo. 14s. cloth.

PASCAL'S ENTIRE WORKS, TRANSLATED BY PEARCE.

THE COMPLETE WORKS OF BLAISE PASCAL: With M. Villemain's Essay on Pascal considered as a Writer and Moralist, prefixed to the *Provincial Letters*; and the *Miscellaneous Writings, Thoughts on Religion*, and *Evidences of Christianity*, rearranged, with large Additions, from the French Edition of Mons. P. Faugère. Newly translated from the French, with Memoir, Introductions to the various Works, Editorial Notes, and Appendices, by George Pearce, Esq. 3 vols. post 8vo. with Portrait, 25s. 6d. cloth.

*** *The Three Volumes may be had separately, as follows:—*

Vol. I.—PASCAL'S PROVINCIAL LETTERS: with M. Villemain's Essay on Pascal prefixed, and a new Memoir. Post 8vo. Portrait, 8s. 6d. cloth.

Vol. II.—PASCAL'S THOUGHTS ON RELIGION, AND EVIDENCES OF CHRISTIANITY, with Additions from original MSS.: from M. Faugère's Edition. Post 8vo. 8s. 6d. cloth.

Vol. III.—PASCAL'S MISCELLANEOUS WRITINGS, CORRESPONDENCE, DETACHED THOUGHTS, etc. from M. Faugère's Edition. Post 8vo. 8s. 6d. cloth.

PASHLEY.—PAUPERISM AND POOR LAWS.

By Robert Pashley, M.A., F.C.P.S., One of Her Majesty's Counsel, and late Fellow of Trinity College, Cambridge; Author of "Travels in Crete." 8vo. Half-a-Guinea, cloth.

PEREIRA.—A TREATISE ON FOOD AND DIET:

With Observations on the Dietetical Regimen suited for Disordered States of the Digestive Organs; and an Account of the Dietaries of some of the principal Metropolitan and other Establishments for Paupers, Lunatics, Criminals, Children, the Sick, etc. By Jon. Pereira, M.D. F.R.S., author of "Elements of Materia Medica." 8vo. 16s. cloth.

PESCHEL (C. F.)—ELEMENTS OF PHYSICS.

By C. F. Peschel, Principal of the Royal Military College, Dresden, etc. etc. Translated from the German, with Notes, by E. West. With Diagrams and Woodcuts. 3 vols. fcap. 8vo. 21s. cloth.

Separately { Part I. The Physics of Ponderable Bodies. Fcap. 8vo. 7s. 6d. cloth.
Part II. Imponderable Bodies (Light, Heat, Magnetism, Electricity, and Electro-Dynamics). 2 vols. fcap. 8vo. 13s. 6d. cloth.

PHILLIPS.—FIGURES AND DESCRIPTIONS OF THE PALÆOZOIC FOSSILS OF CORNWALL, DEVON, and WEST SOMERSET; observed in the course of the Ordnance Geological Survey of that District. By John Phillips, F.R.S. F.G.S. etc. Published by Order of the Lords Commissioners of H. M. Treasury. 8vo. with 60 Plates, comprising very numerous Figures, 9s. cloth.

PORTLOCK.—REPORT ON THE GEOLOGY OF THE COUNTY OF LONDONDERRY, and of Parts of Tyrone and Fermanagh, examined and described under the Authority of the Master-General and Board of Ordnance. By J. E. Portlock, F.R.S. etc. 8vo. with 48 Plates, 24s. cloth.

POWER.—SKETCHES IN NEW ZEALAND,

with Pen and Pencil. By W. Tyrone Power, D.A.C.G. From a Journal kept in that Country, from July 1846 to June 1848. With 8 Plates and 2 Woodcuts, from Drawings made on the spot. Post 8vo. 12s. cloth.

THE VADE-MECUM OF FLY-FISHING FOR TROUT:

Being a complete Practical Treatise on that Branch of the Art of Angling; with plain and copious Instructions for the Manufacture of Artificial Flies. By G. P. R. Pulman, author of "The Book of the Axe." Third Edition, re-written and greatly enlarged; with several Woodcuts. Fcap. 8vo. 6s. cloth.

PYCROFT.—A COURSE OF ENGLISH READING;

Adapted to every Taste and Capacity. With Literary Anecdotes. By the Rev. James Pycroft, B.A., author of "The Collegian's Guide," etc. New Edition. Fcap. 8vo. 8s. cloth.

DR. REECE'S MEDICAL GUIDE:

For the use of the Clergy, Heads of Families, Schools, and Junior Medical Practitioners. Comprising a complete Modern Dispensatory, and a Practical Treatise on the distinguishing Symptoms, Causes, Prevention, Cure, and Palliation of the Diseases incident to the Human Frame. With the latest Discoveries in the different Departments of the Healing Art, Materia Medica, etc. Seventeenth Edition, with considerable Additions; revised and corrected by the Author's Son, Dr. Henry Reece, M.R.C.S. etc. 8vo. 12s. cloth.

RICH.—THE ILLUSTRATED COMPANION TO THE LATIN DICTIONARY AND GREEK LEXICON: forming a Glossary of all the Words respecting Visible Objects connected with the Arts, Manufactures, and Every-day Life of the Ancients. With Representations of nearly Two Thousand Objects from the Antique. By Anthony Rich, jun. B.A., late of Caius College, Cambridge. Post 8vo. with about 2,000 Woodcuts, 21s. cloth.

ARCTIC SEARCHING EXPEDITION.—A JOURNAL OF A

BOAT VOYAGE THROUGH RUPERT'S LAND and the Central Arctic Sea, in Search of the Discovery Ships under command of Sir John Franklin. With an Appendix on the Physical Geography of North America. By Sir John Richardson, C.B., F.R.S., etc., Inspector of Naval Hospitals and Fleets. Published by Authority of the Admiralty. With a coloured Map, several Plates printed in colours, and Woodcuts. 2 vols. 8vo. 31s. 6d. cloth.

RIDDLE.—A COPIOUS AND CRITICAL LATIN-ENGLISH

LEXICON, founded on the German-Latin Dictionaries of Dr. William Freund. By the Rev. J. E. Riddle, M.A., of St. Edmund Hall, Oxford. Post 4to. 50s. cloth.

RIDDLE.—A COMPLETE LATIN-ENGLISH AND ENGLISH-

LATIN DICTIONARY, for the use of Colleges and Schools. By the Rev. J. E. Riddle, M.A., of St. Edmund Hall, Oxford. New Edition, revised and corrected. 8vo. 31s. 6d. cloth.

*** *Separately* { THE ENGLISH-LATIN DICTIONARY, 10s. 6d.
THE LATIN-ENGLISH DICTIONARY, 21s.

RIDDLE.—A DIAMOND LATIN-ENGLISH DICTIONARY.

A Guide to the Meaning, Quality, and right Accentuation of Latin Classical Words. By the Rev. J. E. Riddle, M.A., of St. Edmund Hall, Oxford. New Edition. Royal 32mo. 4s. bound.

RIDDLE AND FREUND'S NEW LATIN DICTIONARY.

A COPIOUS LATIN-ENGLISH DICTIONARY; founded on Andrews's Translation of Freund's larger Latin-German Dictionary: with Improvements and Additions. By the Rev. J. E. Riddle, M.A., and Dr. W. Freund. [*In preparation.*

*** *The American Latin-English Dictionary by Dr. Andrews is a translation of the Latin Dictionary of Dr. Freund, who is now resident in London, and is occupied, in conjunction with Mr. Riddle, in making a thorough revision of his valuable work, with important additions, in order fully to meet the wants of our colleges and schools, and to give to our more mature scholars those aids which they are entitled to receive in the present advanced stage of philological research. Eighteen years have elapsed since Dr. Freund published a large portion of the Dictionary which Dr. Andrews has translated. During a great part of that interval, Dr. Freund has been actively engaged in preparing a second edition of his elaborate work, which will shortly be published in Germany; and in the course of this undertaking, he has employed materials of which, to say the least, no use has been made by Dr. Andrews. The present work will therefore present to the English student extensive results of modern criticism, which have not hitherto been collected in any single volume.*

RIVERS.—THE ROSE AMATEUR'S GUIDE:

Containing ample Descriptions of all the fine leading varieties of Roses, regularly classed in their respective Families; their History and Mode of Culture. By T. Rivers, Jun. Fourth Edition, corrected and improved. Foolscap 8vo. 6s. cloth.

ROBINSON'S LEXICON TO THE GREEK TESTAMENT.

A Greek and English Lexicon of the New Testament. By Edward Robinson, D.D. L.L.D. Professor of Biblical Literature in the Union Theological Seminary, New York; Author of "Biblical Researches in Palestine," etc. New Edition, revised and in great part re-written. 8vo. 18s. cloth.

*** *This is the Author's new edition, in great part rewritten, and containing many additions and improvements not found in any other edition.*

ROGERS'S VEGETABLE CULTIVATOR;

Containing a plain and accurate Description of every species and variety of Culinary Vegetables: With the most approved Modes of Cultivating and Cooking them. New and cheaper Edition. Fcap. 8vo. 5s. cloth.

ROGERS.—ESSAYS SELECTED FROM CONTRIBUTIONS

TO THE EDINBURGH REVIEW. By Henry Rogers. 2 vols. 8vo. 24s. cloth.

ROGET.—THESAURUS OF ENGLISH WORDS AND PHRASES,
Classified and arranged, so as to facilitate the Expression of Ideas, and assist in Literary Composition. By P. M. Roget, M.D., F.R.S., F.G.S., F.R.A.S., F.S.A., etc.; Author of the "Bridgewater Treatise on Animal and Vegetable Physiology," etc. 8vo.
[*Nearly ready.*

RONALDS.—THE FLY-FISHER'S ENTOMOLOGY.
Illustrated by coloured Representations of the Natural and Artificial Insect; and accompanied by a few Observations and Instructions relative to Trout and Grayling Fishing. By Alfred Ronalds. Fourth Edition, corrected; with 20 Copperplates. 8vo. 14*s.* cloth.

ROVINGS IN THE PACIFIC,
From 1837 to 1849; with a GLANCE AT CALIFORNIA. By A Merchant long resident at Tahiti. With 4 Illustrations printed in colours. 2 vols. post 8vo. 21*s.* cloth.

ROWTON (F.)—THE DEBATER:
Being a Series of complete Debates, Outlines of Debates, and Questions for Discussion. With ample references to the best sources of information upon each particular topic. By Frederic Rowton, Lecturer on General Literature. Second Edition. Foolscap 8vo. 6*s.* cloth.

SCHOMBERG.—THE THEOCRATIC PHILOSOPHY OF ENGLISH HISTORY. Being an Attempt to impress upon History its True Genius and Real Character; and to represent it, not as a Disjointed Series of Facts, but as one Grand Whole. By the Rev. J. D. Schomberg, B.A., of Corpus Christi College, Cambridge. 2 vols. 8vo. 21*s.* cloth.

SEAWARD.—SIR EDWARD SEAWARD'S NARRATIVE OF HIS SHIPWRECK, and consequent Discovery of certain Islands in the Caribbean Sea: with a Detail of many extraordinary and highly interesting Events in his Life, from 1733 to 1749, as written in his own Diary. Edited by Miss Jane Porter. New Edition. 2 vols. post 8vo. 21*s.* cloth.

SEWELL.—AMY HERBERT.
By a Lady. Edited by the Rev. William Sewell, B.D., Fellow and Tutor of Exeter College, Oxford. New Edition. 2 vols. foolscap 8vo. 9*s.* cloth.

SEWELL.—THE EARL'S DAUGHTER.
By the Author of "Amy Herbert," "Gertrude," "Laneton Parsonage," "Margaret Percival," and "The Child's History of Rome." Edited by the Rev. William Sewell, B.D., Fellow and Tutor of Exeter College, Oxford. 2 vols. fcap. 8vo. 9*s.* cloth.

SEWELL.—GERTRUDE.
A Tale. By the Author of "Amy Herbert." Edited by the Rev. William Sewell, B.D., Fellow and Tutor of Exeter College, Oxford. New Edition, 2 vols. foolscap 8vo. 9*s.* cloth.

SEWELL.—LANETON PARSONAGE:
A Tale for Children, on the practical Use of a Portion of the Church Catechism. By the author of "Amy Herbert." Edited by the Rev. W. Sewell, B.D., Fellow and Tutor of Exeter College, Oxford. New Edition. 3 vols. fcap. 8vo. 16*s.* cloth.

SEWELL.—MARGARET PERCIVAL.
By the Author of "Amy Herbert." Edited by the Rev. W. Sewell, B.D., Fellow and Tutor of Exeter College, Oxford. New Edition. 2 vols. foolscap 8vo. 12*s.* cloth.

SHAKSPEARE, BY BOWDLER.

THE FAMILY SHAKSPEARE, in which nothing is added to the Original Text; but those Words and Expressions are omitted which cannot with propriety be read aloud. By T. Bowdler, Esq. F.R.S. New Edition; with 36 Illustrations after Smirke, etc. 8vo. 21*s.* cloth; or, without Illustrations, 8 vols. 8vo. 4*l.* 14*s.* 6*d.* boards.

SHARP'S NEW BRITISH GAZETTEER.

A NEW GAZETTEER, OR TOPOGRAPHICAL DICTIONARY OF THE BRITISH ISLANDS AND NARROW SEAS: Comprising concise Descriptions of about Sixty Thousand Places, Seats, Natural Features, and Objects of Note, founded on the best Authorities; full Particulars of the Boundaries, Registered Electors, etc. of the Parliamentary Boroughs; with a Reference under every Name to the Sheet of the Ordnance Survey, as far as completed; and an Appendix, containing a General View of the Resources of the United Kingdom, a short Chronology, and an Abstract of certain Results of the Census of 1851. By James A. Sharp, Esq. Uniform with Johnston's New *General Gazetteer* of the World. 2 vols. 8vo. 2*l.* 16*s.* cloth.

*** Sharp's British Gazetteer *is also in course of publication in Twenty-two Monthly Parts, price Half-a-Crown each.*

SHEPHERD.—THE HISTORY OF THE CHURCH OF ROME,

To the End of the Episcopate of Damascus, A.D. 384. By Edward John Shepherd, A.M., Rector of Luddesdown. 8vo. 14*s.* cloth.

SHORT WHIST:

Its Rise, Progress, and Laws; with the recent Decisions of the Clubs, and Observations to make any one a Whist Player. Containing also the Laws of Piquet, Cassino, Ecarte, Cribbage, Backgammon. By Major A * * * * * New Edition. To which are added, Precepts for Tyros By Mrs. B * * * * * Foolscap 8vo. 3*s.* cloth, gilt edges.

SINCLAIR.—THE JOURNEY OF LIFE.

By Catherine Sinclair, author of "Popish Legends or Bible Truths," "The Business of Life," etc. New Edition, corrected and enlarged. Fcap. 8vo. 5*s.* cloth.

SINCLAIR.—POPISH LEGENDS OR BIBLE TRUTHS.

By Catherine Sinclair, Author of "The Journey of Life," "The Business of Life," etc. Dedicated to her Nieces. Fcap. 8vo. 6*s.* cloth.

SIR ROGER DE COVERLEY.

From *The Spectator*. With Notes and Illustrations by W. Henry Wills; and Twelve fine Wood Engravings by John Thompson from Designs by Frederick Tayler. Crown 8vo. 15*s.* boards; or 27*s.* bound in morocco by Hayday.

*** *Also a Cheap Edition, without Engravings, in* 16*mo. price One Shilling.*

SMEE.—ELEMENTS OF ELECTRO-METALLURGY.

By Alfred Smee, F.R.S., Surgeon to the Bank of England. Third Edition, revised, corrected, and considerably enlarged; with Electrotypes and numerous Woodcuts. Post 8vo. 10*s.* 6*d.* cloth.

THE WORKS OF THE REV. SYDNEY SMITH.

Comprising the Author's Miscellaneous Writings, and Contributions to the Edinburgh Review. New Edition, complete in One Volume; with Portrait by E. U. Eddis, engraved in Line by W. Greatbach, and View of Combe Florey Rectory, Somerset. Square crown 8vo. 21*s.* cloth; 30*s.* calf extra, by Hayday.—Or in 3 vols. 8vo. with Portrait, 36*s.* cloth.

SMITH.—ELEMENTARY SKETCHES OF MORAL PHILOSOPHY,

delivered at the Royal Institution in the Years 1804, 1805, and 1806. By the late Rev. Sydney Smith, M.A. With an Introductory Letter to Mrs. Sydney Smith, by the late *Lord Jeffrey*. Second Edition. 8vo. 12*s.* cloth.

SMITH.—THE VOYAGE AND SHIPWRECK OF ST. PAUL:

with Dissertations on the Sources of the Writings of St. Luke, and the Ships and Navigation of the Ancients. By James Smith, Esq. of Jordanhill, F.R.S. etc. With Illustrative Views, Charts, and Woodcuts. 8vo. 14*s.* cloth.

SMITH.—TASSO'S JERUSALEM DELIVERED.

Translated, in the Metre of the Original, by the Rev. Charles Lesingham Smith, M.A., late Fellow and Mathematical Lecturer of Christ's College, Cambridge. 2 vols. fcap. 8vo. 12*s.* cloth.

SNOW.—VOYAGE OF THE PRINCE ALBERT IN SEARCH

OF SIR JOHN FRANKLIN. A Narrative of Every-day Life in the Arctic Seas. By W. Parker Snow. With a Chart, and 4 Illustrations printed in colours. Post 8vo. 12*s.* cloth.

THE LIFE AND CORRESPONDENCE OF THE LATE ROBERT

SOUTHEY. Edited by his Son, the Rev. Charles Cuthbert Southey, M.A. Vicar of Ardleigh. With numerous Portraits; and Six Landscape Illustrations from Designs by W. Westall, A.R.A. 6 vols. post 8vo. 63*s.* cloth.

*** Each of the Six Volumes may be had separately, price Half-a-Guinea.

"A work which, even in this age of literary plenty, will long stand unrivalled for the deeply interesting character of its contents; whether we have regard to the man whose history it relates, and whose innermost thoughts are laid open to us, or to the various important subjects upon which his capacious mind was constantly exercised." John Bull.

SOUTHEY'S COMMON-PLACE BOOKS.

THE COMMON-PLACE BOOKS of the late Robert Southey. Comprising—1. Choice Passages; With Collections for the History of Manners and Literature in England; 2. Special Collections on various Historical and Theological Subjects; 3. Analytical Readings in various branches of Literature; and 4. Original Memoranda, Literary and Miscellaneous. Edited by Mr. Southey's Son-in-Law, the Rev. John Wood Warter, B.D. 4 vols. square crown 8vo. 3*l.* 18*s.* cloth.

*** Each Series of Southey's Common-Place Books forms a distinct Volume, complete in itself, and may be had separately as follows:—

FIRST SERIES—CHOICE PASSAGES, etc. Second Edition; with medallion Portrait. Price 18*s.*

SECOND SERIES—SPECIAL COLLECTIONS. Price 18*s.*

THIRD SERIES—ANALYTICAL READINGS. One Guinea.

FOURTH SERIES—ORIGINAL MEMORANDA, etc. One Guinea.

SOUTHEY.—THE DOCTOR ETC.

By the late Robert Southey. Complete in One Volume. Edited by the Author's Son-in-Law, the Rev. John Wood Warter. With Portrait, Vignette Title-page, Bust of the Author, and Coloured Plate. New Edition. Square crown 8vo. 21*s.* cloth.

SOUTHEY.—THE LIFE OF WESLEY,

And Rise and Progress of Methodism. By Robert Southey, Esq. LL.D. New Edition, with Notes by the late Samuel Taylor Coleridge, Esq., and Remarks on the Life and Character of John Wesley, by the late Alexander Knox, Esq. Edited by the Rev. Charles Cuthbert Southey, M.A. 2 vols. 8vo. with two Portraits, 1*l.* 8*s.* cloth.

ROBERT SOUTHEY'S COMPLETE POETICAL WORKS:

Containing all the Author's last Introductions and Notes. Complete in One Volume, with Portrait and View of the Poet's Residence at Keswick; uniform with Lord Byron's and Moore's Poetical Works. Medium 8vo. 21*s.* cloth; 42*s.* bound in morocco, by Hayday.—Or in 10 vols. foolscap 8vo. with Portrait and 19 Plates, 2*l.* 10*s.*; morocco, 4*l.* 10*s.*

SOUTHEY—SELECT WORKS OF THE BRITISH POETS,
From Chaucer to Lovelace inclusive. With Biographical Sketches by the late R Southey. Medium 8vo. 30s. cloth.

SQUIER.—NICARAGUA; ITS PEOPLE, SCENERY, MO
MENTS, AND THE PROPOSED INTEROCEANIC CANAL. By E. G. Squier, Chargé d'Affaires of the United States to the Republics of Central America. With Original Maps, Twenty-five Plates printed in colours, and numerous Woodcut Illu tions. 2 vols. royal 8vo. 31s. 6d. cloth.

STEEL'S SHIPMASTER'S ASSISTANT.
Compiled for the use of Merchants, Owners and Masters of Ships, Officers of Customs all Persons connected with Shipping or Commerce; containing the Law and Local Re tions affecting the Ownership, Charge, and Management of Ships and their Car together with Notices of other Matters, and all necessary Information for Mariners. Edition, rewritten throughout. Edited by Graham Willmore, Esq. M.A. Barrister-at- George Clements, of the Customs, London; and William Tate, author of "The M Cambist." 8vo. 28s. cloth; or 29s. bound.

STEPHEN.—LECTURES ON THE HISTORY OF FRANC
By the Right Honourable Sir James Stephen, K.C.B., LL.D., Professor of Modern Hi in the University of Cambridge. 2 vols. 8vo. 24s. cloth.

STEPHEN—ESSAYS IN ECCLESIASTICAL BIOGRAPHY.
From The Edinburgh Review. By the Right Honourable Sir James Stephen, K.B., I Professor of Modern History in the University of Cambridge. Second Edition. 2 8vo. 24s. cloth.

STOW.—THE TRAINING SYSTEM, THE MORAL TRAIN
SCHOOL, AND THE NORMAL SEMINARY. By David Stow, Esq., Honorary Sec to the Glasgow Normal Free Seminary; author of "Moral Training," etc. Eighth Ed enlarged; with Plates and Woodcuts. Post 8vo. 6s. cloth.

SWAIN.—ENGLISH MELODIES.
By Charles Swain, author of "The Mind, and other Poems." Fcap. 8vo. 6s. cloth; or in morocco, 12s.

SYMONS.—THE MERCANTILE MARINE LAW.
By Edward William Symons, Chief Clerk of the Thames Police Court. Fifth Editio cluding the Act passed in 1851 to amend the Mercantile Marine Act of 1850, a provisions of the New Act relating to the Merchant Seamen's Fund. 12mo. 5s. cloth.

TATE.—EXERCISES ON MECHANICS AND NATU
PHILOSOPHY; or, an Easy Introduction to Engineering. Containing various Applic of the Principle of Work: the Theory of the Steam-engine, with simple Mechanics; rems and Problems on accumulated Work, etc. New Edition. 12mo. 2s. cloth.

KEY TO TATE'S EXERCISES ON MECHANICS AND
TURAL PHILOSOPHY. Containing full Solutions of all the unworked Exampl Problems. 12mo. with Diagrams, 3s. 6d. cloth.

TATE.—ON THE STRENGTH OF MATERIALS:
Containing various original and useful Formulæ, specially applied to Tubular B Wrought Iron and Cast Iron Beams, etc. By Thomas Tate, of Kneller Training C Twickenham; late Mathematical Professor and Lecturer on Chemistry in the N Society's Training College, Battersea; author of "Exercises on Mechanics and N Philosophy." 8vo. 5s. 6d. cloth.

THE TRAVELLER'S LIBRARY,

Published Monthly, and sold at One Shilling each Part, is intended to comprise books of valuable information and acknowledged merit, in a form adapted for reading while Travelling, and at the same time of a character that will render them worthy of preservation; but the *price* of which has hitherto confined them within a comparatively narrow circle of readers.

The first Eighteen Parts comprise

1. WARREN HASTINGS. By Thomas Babington Macaulay. Reprinted from Mr. Macaulay's "Critical and Historical Essays." Price One Shilling.

2. LORD CLIVE. By Thomas Babington Macaulay. Reprinted from Mr. Macaulay's "Critical and Historical Essays." Price One Shilling.

*** Mr. Macaulay's Two Essays on Warren Hastings and Lord Clive may be had in One Volume, 16mo. price Half-a-Crown, cloth.

3. LONDON IN 1850—51. By J. R. M'Culloch, Esq. Reprinted from Mr. M'Culloch's "Geographical Dictionary." Price One Shilling.

4. SIR ROGER DE COVERLEY. From the "Spectator." With Notes and Illustrations by W. H. Wills. Price One Shilling.

5. WILLIAM PITT, EARL OF CHATHAM. By Thomas Babington Macaulay. Price One Shilling.

6 and 7. Mr. S. LAING'S JOURNAL OF A RESIDENCE IN NORWAY during the Years 1834, 1835, and 1836. Two Parts, price One Shilling each; or in One Volume, 16mo. price Half-a-Crown, cloth.

8. "RANKE'S HISTORY OF THE POPES." And "GLADSTONE ON CHURCH AND STATE." By Thomas Babington Macaulay. Price One Shilling.

*** Mr. Macaulay's Four Essays on "William Pitt, Earl of Chatham," "Ranke's History of the Popes," and "Gladstone on Church and State," may be had in One Volume, 16mo. price Half-a-Crown, cloth.

9 and 10. A LADY'S VOYAGE ROUND THE WORLD. A condensed Translation from the German of Ida Pfeiffer, by Mrs. Percy Sinnett. In Two Parts, price One Shilling each; or in One Volume, 16mo. price Half-a-Crown, cloth.

11 and 12. EÖTHEN; or, Traces of Travel brought Home from the East. A New Edition, in Two Parts, price One Shilling each; or in One Volume, 16mo. price Half-a-Crown, cloth.

13. "THE LIFE AND WRITINGS OF ADDISON." And HORACE WALPOLE. By Thomas Babington Macaulay. Price One Shilling.

14 and 15. HUC'S TRAVELS IN TARTARY, THIBET, AND CHINA. A condensed Translation, by Mrs. Percy Sinnett. Two Parts, price One Shilling each; in One Volume, 16mo. price Half-a-Crown, cloth.

16 and 17. HOLCROFT'S MEMOIRS, written by Himself, and continued to his Death from his Diary, Notes, and other Papers. Two Parts, price One Shilling each; or in One Volume, 16mo. price Half-a-Crown, cloth.

18. LECTURES AND ADDRESSES. By the Earl of Carlisle. Price One Shilling.

To be followed by—

AFRICAN WANDERINGS; Or, an Expedition from Sennaar to Taka, Basa, and Beni-Amer: With a particular Glance at the Races of Bellad Sudan. By Ferdinand Werne, Author of "Expedition in Search of Sources of the White Nile." Translated from the German by J. R. Johnston. Forming Two Parts of the *Traveller's Library*. 16mo.

SKETCHES IN CANADA, AND RAMBLES AMONG THE RED MEN. By Mrs. Jameson. Forming Two Parts of the *Traveller's Library*. 16mo.

TAYLER (REV. CHARLES B.)—MARGARET;

Or, the Pearl. By the Rev. Charles B. Tayler, M.A., author of "Lady Mary; or, the World;" etc. New Edition. Foolscap 8vo. 6s. cloth.

TAYLER (REV. CHARLES B.)—LADY MARY; OR, NO

THE WORLD. By the Rev. Charles B. Tayler, author of "Margaret, or the Pea New Edition. Foolscap 8vo. with Frontispiece, 6s. 6d. cloth.

TAYLOR.—WESLEY AND METHODISM.

By Isaac Taylor, Author of "Natural History of Enthusiasm," etc. With a Po Wesley, engraved by W. Greatbach. Post 8vo. Half-a-Guinea, cloth.

"*All the characteristics of early Methodism are analysed in the present volume wit crimination, and described with a clearness, such as we might expect from the philo and eloquent author of the* Natural History of Enthusiasm. . . . . *Of the Me of the eighteenth century, the corporeal part remains in the Wesleyan Connexion ; of it, while partly animating that body, was transfused into all Christian Churches that great movement became a starting-point in our modern history, and how it source of what is most characteristic of the present time, as contrasted with the corres period of last century, not in religion only, but in the general tone of national feeli manners, and literature, Mr. Taylor ably shews.*" Literary Ga

TAYLOR.—LOYOLA: AND JESUITISM

In its Rudiments. By Isaac Taylor, author of "Natural History of Enthusiasm." medallion Portrait. Post 8vo. 10s. 6d. cloth.

THIRLWALL.—THE HISTORY OF GREECE.

By the Right Rev. the Lord Bishop of St. David's, (the Rev. Connop Thirlwall). proved Library Edition; with Maps. 8 vols. 4l. 14s. cloth.

*** *Also, an Edition in 8 vols. fcap. 8vo. with Vignette Titles,* 1l. 8s. *cloth.*

THIRLWALL'S GREECE, ABRIDGED BY DR. L. SCHM

A History of Greece, from the Earliest Time to the Taking of Corinth by the Roma 146, mainly based upon Bishop Thirlwall's History of Greece. By Dr. Leonhard S F.R.S.E., Rector of the High School of Edinburgh. Second Edition. 12mo. 7s. 6d.

THOMSON'S SEASONS.

Edited by Bolton Corney, Esq. Illustrated with Seventy-seven Designs drawn on W the Members of the Etching Club. Engraved by Thompson and other eminent En Square crown 8vo. uniform with *Goldsmith's Poems illustrated by the Etchin* 21s. cloth; bound in morocco, by Hayday, 36s.

THOMSON (JOHN).—TABLES OF INTEREST,

At Three, Four, Four-and-a-half, and Five per Cent., from One Pound to Ten Th and from One to Three Hundred and Sixty-five Days, in a regular progression o Days; with Interest at all the above Rates, from One to Twelve Months, and fron Ten Years. Also, Tables shewing the Exchange on Bills, etc. etc. etc. By John Th Accountant. New Edition. 12mo. 8s. bound.

THOMSON—SCHOOL CHEMISTRY;

Or Practical Rudiments of the Science. By Robert Dundas Thomson, M.D. M Surgery in the University of Glasgow; Lecturer on Chemistry in the same Universi formerly in the Medical Service of the Honourable East India Company. Foolsc with Woodcuts, 7s. cloth.

THE THUMB BIBLE;

Or, Verbum Sempiternum. By J. Taylor. Being an Epitome of the Old and New *ments* in English Verse. New Edition, printed from the Edition of 1693, by C. W ham, Chiswick. 64mo. 1s. 6d. bound and clasped.

TOMLINE (BISHOP).—AN INTRODUCTION TO THE STUDY OF THE BIBLE; Being the First Volume of the Elements of Christian Theology; containing Proofs of the Authenticity and Inspiration of the Holy Scriptures; a Summary of the History of the Jews; an Account of the Jewish Sects; and a brief Statement of the Contents of the several Books of the Old Testament. By the late George Tomline, D.D.F.R.S. New Edition. Foolscap 8vo. 5s. 6d. cloth.

TOOKE.—THE HISTORY OF PRICES;
With reference to the Causes of their principal Variations, from the year 1792 to the year 1847, inclusive. With a Sketch of the History of the Corn Trade in the last Two Centuries; a General Review of the Currency Question; and Remarks on the Operation of the Acts 7 & 8 Victoria, c. 32. By Thomas Tooke, Esq. F.R.S. 4 vols. 8vo. 3l. 6s. cloth.

TOWNSEND.—MODERN STATE TRIALS.
Revised and illustrated with Essays and Notes. By William Charles Townsend, Esq. M.A. Q.C., late Recorder of Macclesfield. 2 vols. 8vo. 30s. cloth.

"Mr. Townsend has done an acceptable service both to the legal profession and the public in forming this collection of some of the most important and interesting judicial proceedings which have ever been witnessed in English courts of justice. . . . We need say no more to recommend the volumes of Mr. Townsend, which, whether as a record of precedents or a repertory of some of the most remarkable specimens of forensic eloquence, are equally useful."
Morning Chronicle.

TOWNSEND.—THE LIVES OF TWELVE EMINENT JUDGES OF THE LAST AND OF THE PRESENT CENTURY. By W. Charles Townsend, Esq., M.A. Q.C., late Recorder of Macclesfield. 2 vols. 8vo. 28s. cloth.

TURNER.—THE SACRED HISTORY OF THE WORLD,
Attempted to be Philosophically considered, in a Series of Letters to a Son. By Sharon Turner, F.S.A. and R.A.S.L. Eighth Edition, edited by the Rev. Sydney Turner. 3 vols. post 8vo. 31s. 6d. cloth.

TURNER—THE HISTORY OF THE ANGLO-SAXONS,
From the Earliest Period to the Norman Conquest. By Sharon Turner, F.R.S. and R.A.S.L. The Seventh Edition (1852). 3 vols. 8vo. 36s. cloth.

*** The text and notes of this edition have been carefully revised, and as many of the Author's later corrections and additions as appeared to have been intended and prepared by him for publication, have been introduced.*

TURTON'S (DR.) MANUAL OF THE LAND AND FRESH WATER SHELLS OF THE BRITISH ISLANDS. A new Edition, thoroughly revised with Additions. By John Edward Gray. Post 8vo. with Woodcuts, and 12 coloured Plates 15s. cloth.

URE.—DICTIONARY OF ARTS, MANUFACTURES, AND MINES: Containing a clear Exposition of their Principles and Practice. By Andrew Ure, M.D. F.R.S. M.G.S. M.A.S. Lond., M. Acad. N.S. Philad.; S. Ph. Soc. N. Germ. Hanov.; Mulhii, etc. etc. 3d Edition, corrected. 8vo. with 1,241 Woodcuts. 50s. cloth.

By the same Author,

SUPPLEMENT OF RECENT IMPROVEMENTS. 2d Edition. 8vo. 14s. cloth.

WATERTON.—ESSAYS ON NATURAL HISTORY,
Chiefly Ornithology. By Charles Waterton, Esq., author of "Wanderings in South America." With an Autobiography of the Author, and Views of Walton Hall. New Editions. 2 vols. foolscap 8vo. 14s. 6d. cloth.

**** Separately*—Vol. I. (First Series), 8s.; Vol. II. (Second Series), 6s. 6d.

ALARIC WATTS'S POETRY AND PAINTING.—LYRICS

THE HEART; with other Poems. By Alaric A. Watts. With Forty-one highly-fi
Line Engravings, executed expressly for this work by the most eminent Painter
Engravers.

In one Volume, square crown 8vo. price 31*s.* 6*d.* boards, or 45*s.* bound in morocco by Ha
Proof Impressions, 63*s.* boards.—Plain Proofs 41, Plates, demy 4to. (only 100 copies pri
2*l.* 2*s.* in portfolio; India Proofs before letters, colombier 4to. (only 50 copies printed),
in portfolio.

WEBSTER.—AN ENCYCLOPÆDIA OF DOMESTIC ECONO

Comprising such subjects as are most immediately connected with Housekeeping
The Construction of Domestic Edifices, with the Modes of Warming, Ventilating
Lighting them—A Description of the various Articles of Furniture, with the Nature of
Materials—Duties of Servants, etc. etc. By Thomas Webster, F.G.S., etc. etc.; as
by the late Mrs. Parkes. New Edition. 8vo. with nearly 1,000 Woodcuts, 50*s.* cloth

WHEATLEY.—THE ROD AND LINE;

Or, Practical Hints and Dainty Devices for the sure taking of Trout, Grayling, etc
Hewett Wheatley, Esq., Senior Angler. Foolscap 8vo. with Nine coloured Plates, 10
cloth.

LADY WILLOUGHBY'S DIARY.

So much of the Diary of Lady Willoughby as relates to her Domestic History, and t
Eventful Reign of King Charles the First, the Protectorate, and the Restoration (16
1663). Printed, ornamented, and bound in the style of the period to which *The Diary* r
New Edition; in Two Parts. Square foolscap 8vo. 8*s.* each, boards; or 18*s.* each, b
in morocco *by Hayday.*

YOUATT.—THE HORSE.

By William Youatt. With a Treatise of Draught. A New Edition; with numerous
Engravings from Designs by William Harvey. 8vo. 10*s.* cloth.

*** *Messrs. Longman and Co.'s Edition should be ordered.*

YOUATT.—THE DOG.

By William Youatt. A New Edition; with numerous Wood Engravings from Desig
William Harvey. 8vo. 6*s.* cloth.

*** *The above works, which were prepared under the superintendence of the Society f*
Diffusion of Useful Knowledge, are now published by Messrs. Longman and Co., by a
ment from Mr. Charles Knight. It is to be observed, that the edition of Mr. Youatt's bo
the Horse which Messrs. Longman and Co. have purchased from Mr. Knight, is that whic
thoroughly revised by the author, and thereby rendered in many respects a new work.
engravings also were greatly improved. Both works are the most complete treatises
language on the History, Structure, Diseases, and Management of the Animals of which
treat.

ZINCKE.—SOME THOUGHTS ABOUT THE SCHOOL

THE FUTURE; or, a Sketch of the Solution which Time appears to be preparing f
different Educational Questions of the Day. By the Rev. Foster Barham Zincke, Vi
Wherstead, near Ipswich. Post 8vo. 7*s.* cloth.

"*We have no space to devote to the nature of the alteration which the author propo*
make in the subjects of instruction and in the manner of teaching. On this point a
various others, such as the effects which would be likely to be produced by the establishme
a system of this nature, we must refer to the treatise. We would only add, in conclu
that it contains a masterly analysis of the errors, the short-comings, and the mischiefs o
present state with regard to education, and the admirable suggestions as to the practica
of the establishment in its place of a system which may be productive of incalculable b
to the coming generation."
Daily Ne

ZUMPT.—A GRAMMAR OF THE LATIN LANGUAGE.

By C. G. Zumpt, Ph. D. Professor in the University, and Member of the Royal Acade
Berlin. Translated from the 9th Edition of the original, and adapted to the use of E
Students, by Leonhard Schmitz, Ph. D., Rector of the High School of Edinburgh;
numerous Additions and Corrections by the Author. New Edition. 8vo. 14*s.* cloth.

March 31, 1

London: Printed by M. MASON, Ivy Lane, Paternoster Row.

LARDNER'S CABINET CYCLOPÆDIA.

A SERIES of ORIGINAL WORKS.

Price THREE SHILLINGS AND SIXPENCE *each* VOLUME.

THE SERIES, *in* 132 VOLUMES, £19. 19s.

The LIVES of British DRAMATISTS. By Dr. Dunham, R. Bell Esq. &c. 2 vols. 7s.

The EARLY WRITERS of GREAT BRITAIN. By Dr. Dunham, R. Bell, Esq. &c 1 vol. 3s. 6d

LIVES of the most Eminent FOREIGN STATESMEN. By G. P. R. James, Esq. and E. E. Crowe, Esq. 5 vols. . . . . 17s. 6d.

LIVES of the most Eminent FRENCH WRITERS. By Mrs. Shelley, and others. 2 vols. . . . . 7s.

LIVES of the most Eminent LITERARY MEN of ITALY, SPAIN, and PORTUGAL. By Mrs. Shelley, Sir D. Brewster. J. Montgomery, &c. 3 vols. . . . 10s. 6d.

A PRELIMINARY DISCOURSE on the STUDY of NATURAL PHILOSOPHY. By Sir John Herschel. 1 vol. . . 3s. 6d.

The HISTORY of NATURAL PHILOSOPHY, from the earliest Periods to the present Time By Baden Powell, A M Savilian Professor of Mathematics in the University of Oxford. 1 vol. . . . . 3s. 6d.

A TREATISE on ARITHMETIC. By D. Lardner, LL.D. F R.S. 1 vol. . 3s. 6d.

A TREATISE on ASTRONOMY. By Sir John Herschel. 1 vol. . . 3s. 6d.

A TREATISE on MECHANICS. By Capt. Kater and Dr. Lardner. 1 vol. 3s. 6d.

A TREATISE on OPTICS. By Sir David Brewster, LL.D. F.R.S. &c. 1 vol. 3s. 6d.

A TREATISE on HEAT. By Dr. Lardner. 1 vol. . . . . 3s. 6d.

A TREATISE on CHEMISTRY. By Michael Donovan, M.R I.A. 1 vol. 3s. 6d.

A TREATISE on HYDROSTATICS and PNEUMATICS. By Dr. Lardner. 1 vol. 3s. 6d.

An ESSAY on PROBABILITIES, and on their application to Life Contingencies and Insurance Offices By Aug. De Morgan, of Trinity College, Cambridge. 1 vol. 3s. 6d.

A TREATISE on GEOMETRY, and its application to the Arts. By Dr. Lardner. 1 vol. . . . . 3s. 6d.

A MANUAL of ELECTRICITY, MAGNETISM, and METEOROLOGY. By D. Lardner, D.C.L. F.R.S. &c.; and C. V. Walker, Esq. Secretary to the Electrical Society. 2 vols. . .

A TREATISE on the MANUFACTURE of SILK. By G. R. Porter, Esq. F.R.S. Author of "The Progress of the Nation," &c. 1 vol. . . . . 3s. 6d.

A TREATISE on the MANUFACTURES of PORCELAIN and GLASS. By G. R. Porter, Esq. F.R.S. 1 vol. . 3s. 6d.

A TREATISE on the MANUFACTURES in METAL. By J. Holland, Esq. 3 vols. . . . . 10s. 6d.

A TREATISE on DOMESTIC ECONOMY. By M. Donovan, Esq. M.R.I.A. Professor of Chemistry to the Company of Apothecaries in Ireland. 2 vols. . . . 7s.

A PRELIMINARY DISCOURSE on the STUDY of NATURAL HISTORY. By W. Swainson, Esq. F.R.S. L S. 1 vol. 3s. 6d.

On the HABITS and INSTINCTS of ANIMALS. By William Swainson, Esq. 1 vol. . . . . 3s. 6d.

A TREATISE on the NATURAL HISTORY and CLASSIFICATION of ANIMALS. By W. Swainson, Esq. 1 vol. 3s. 6d.

On the NATURAL HISTORY and CLASSIFICATION of QUADRUPEDS. By W. Swainson, Esq. 1 vol. . . 3s. 6d.

On the NATURAL HISTORY and CLASSIFICATION of BIRDS. By W. Swainson, Esq. 2 vols. . . . . 7s.

ANIMALS in MENAGERIES. By W. Swainson, Esq. 1 vol. . . 3s. 6d.

On the NATURAL HISTORY and CLASSIFICATION of FISH, REPTILES, &c. By W. Swainson, Esq. 2 vols. . 7s.

The HISTORY and NATURAL ARRANGEMENT of INSECTS. By W. Swainson, Esq. and W. E. Shuckard, Esq. 1 vol. . . . . 3s. 6d.

A TREATISE on MALACOLOGY; or, the Natural Classification of Shells and Shell-Fish. By William Swainson, Esq. 1 vol. . . . . 3s. 6d.

TREATISE on TAXIDERMY. With the Biography of the Zoologists, and Notices of their Works. By W. Swainson. 1 vol. 3s. 6d.

A TREATISE on GEOLOGY. By John Phillips, F.R.S. G.S. Professor of Geology, King's College, London. 2 vols. . 7s.

The PRINCIPLES of DESCRIPTIVE and PHYSIOLOGICAL BOTANY. By the [illegible] A. &c. 1 vol. 3s. 6d.

LONDON: LONG[illegible] LONGMANS.

BOUND BY [illegible] & Co.